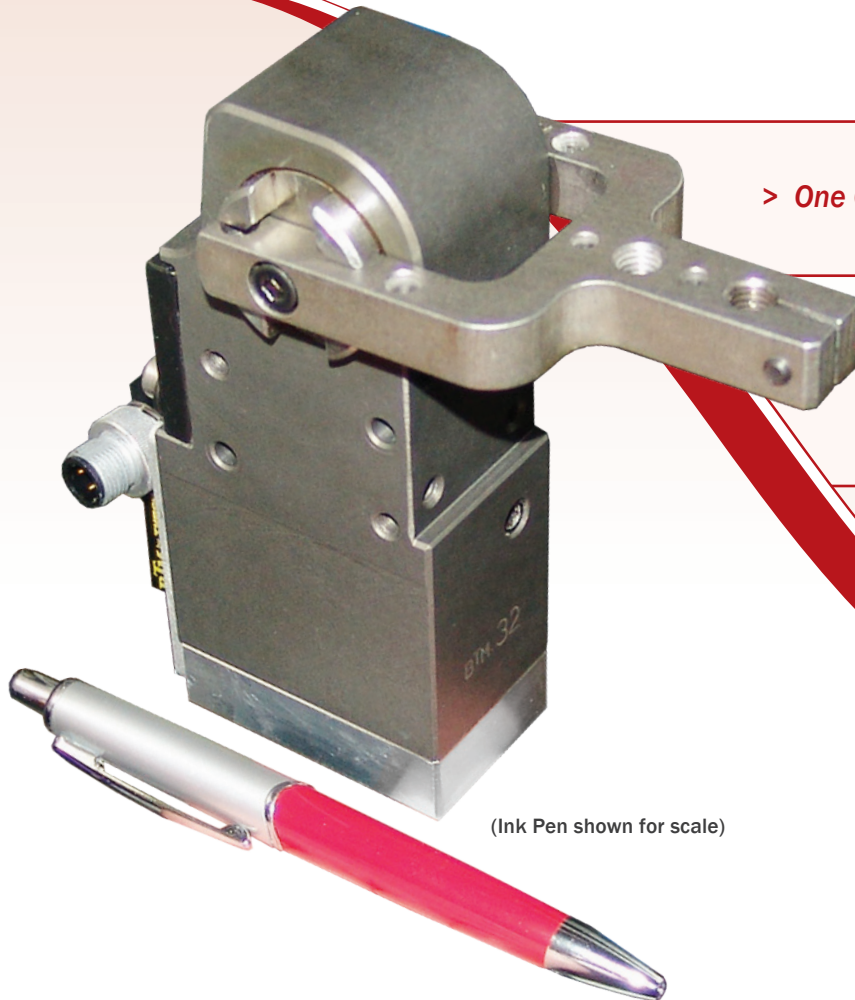


TPC-32 Power Clamp Catalog

Weld-contamination sealed, pneumatic, precision, locking Power Clamp



(Ink Pen shown for scale)

> One Clamp Model for Single and Dual Arm Clamps

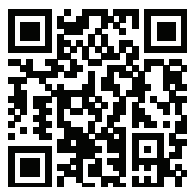
> Uses a TRILOK Locking Mechanism

> Compact & Light-Weight

... and more.

Part of our Power Clamp line of Products.

<http://www.btmcomp.com/tpc-32-clamp.html>



BTM[®]
COMPANY

www.btmcomp.com

810-364-4567



SAFETY NOTE

It is the customer and/or user's responsibility to provide proper safety controls and/or guarding when a pinch point is present.

INTRODUCTION

BTM's TPC-32 features a 32mm bore, and a three point locking mechanism which is designed to remain locked even if air pressure is lost. This clamp is compact, light weight, and sealed against weld-contamination.

TPC-32 CLAMP FEATURES

- Patented TriLok Mechanism
- Sealed Mechanism - Lubricated for Life of Clamp
- Integral Cylinder with Heavy Wall
- Body is constructed of Aircraft Aluminum, Hard coated to a Rockwell C-70 for Excellent Wear Characteristics
- One clamp model for single and dual arm clamps
- Access to manually unlock clamp linkage
- Integrated proximity switches do not need to be readjusted when arm opening changes.

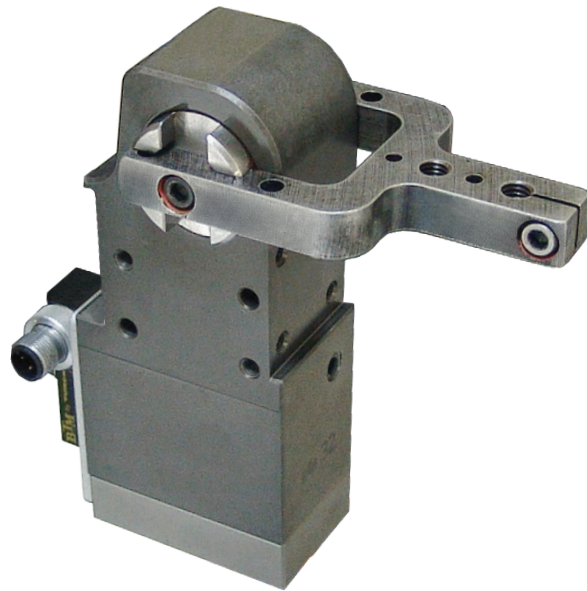


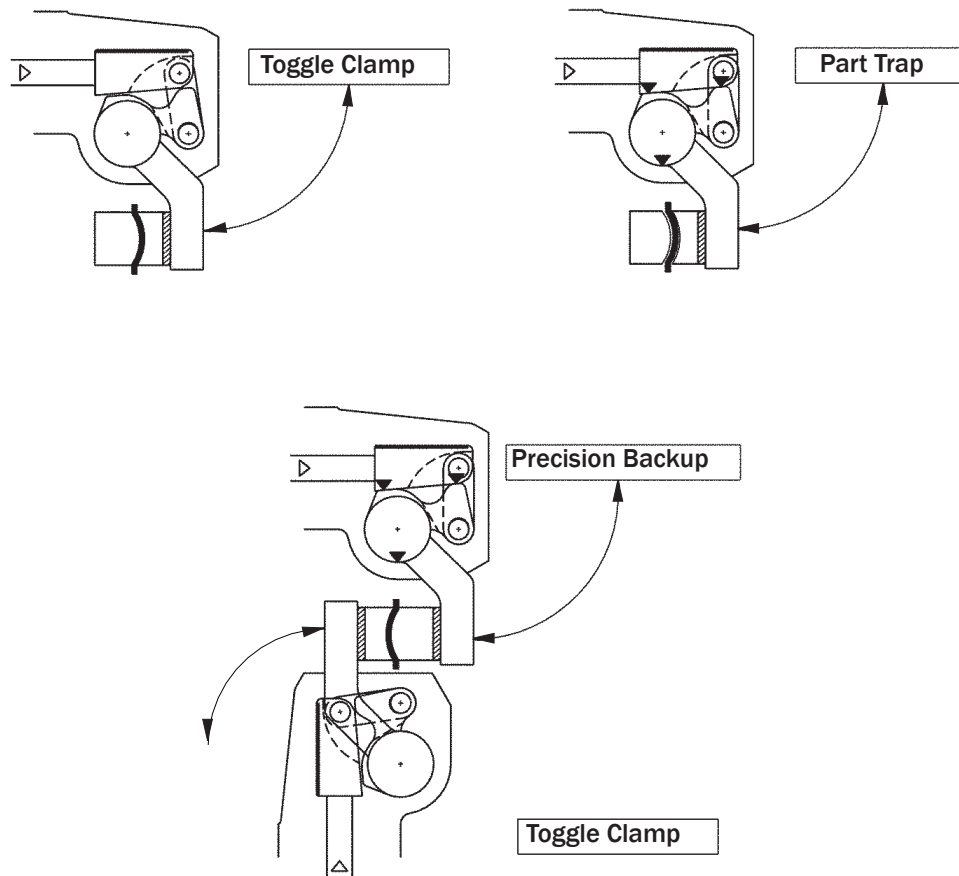
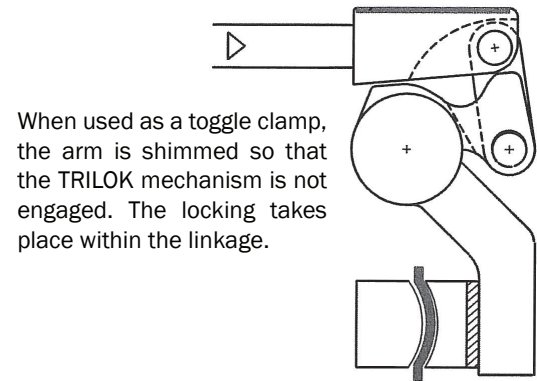
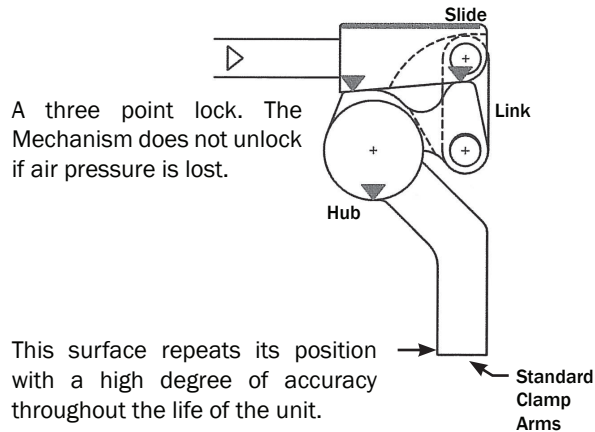
TABLE OF CONTENTS

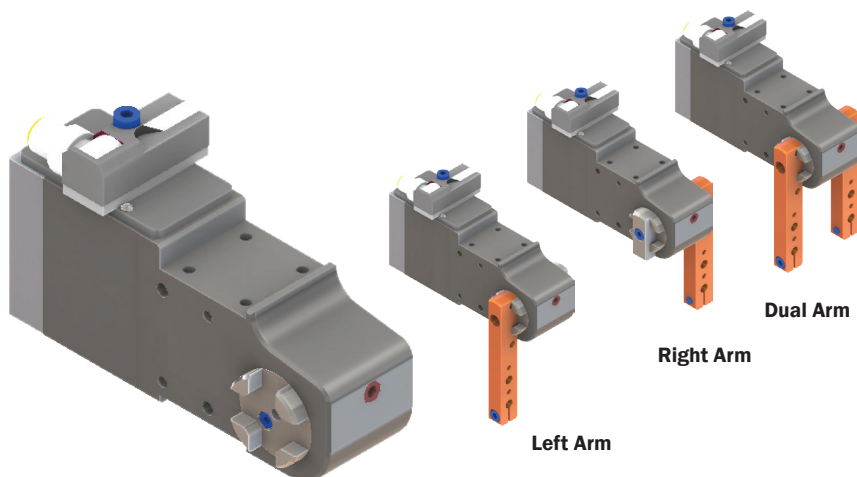
<u>TPC-32</u>	<u>4-5</u>
<u>Switch Information</u>	<u>6</u>
<u>Warranty Information</u>	<u>7</u>



BTM reserves the right to make changes to its literature without any prior notice.
Go to www.btmcomp.com for latest version.

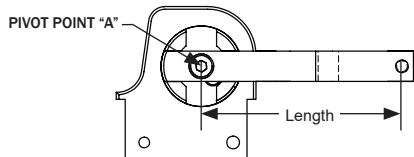
TPC-32 CLAMPS UTILIZE PATENTED TriLok TECHNOLOGY



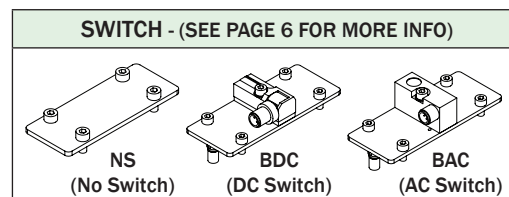
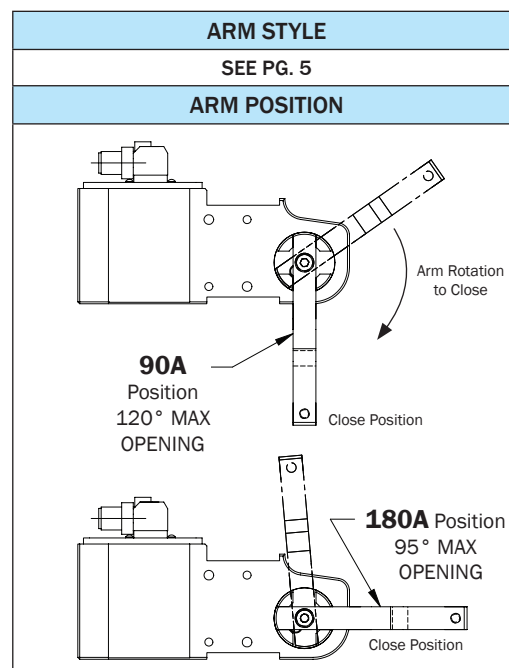


Bore Size	31.8 [1.25] DIA. - 791.7mm ² [1.23in ²]						
Arm Rotation (Deg.)	35	50	65	80	95	110	120
Cylinder Stroke (mm)	11.5	14.1	16.6	19.2	21.8	24.4	24.6
Maximum Full Cycle Cylinder Volume	38.5 cm ³ [2.35in ³]						
Recommended Operating Pressure	2.75 to 7 BAR [40 to 100 PSI] (Lubricated or Non-Lubricated Compressed Air)						
Weight	1.0 kg [2.21 lbs] Without Arm						
Clamping Torque	12.4 Nm @ 5.5 BAR [9.16 lbf @ 80 PSI]						
Cycle Time (based on a 120° opening at 5.5 BAR [80PSI])	1.0 second closing cycle 1.25 second opening cycle						

CLAMPING FORCE	
BARS	2253 x Line Pressure (BAR) Length (mm) from POINT "A" to the center line of clamping contact area on clamp arm
PSI	1.375 x Line Pressure (PSI) Length (in) from POINT "A" to the center line of clamping contact area on clamp arm

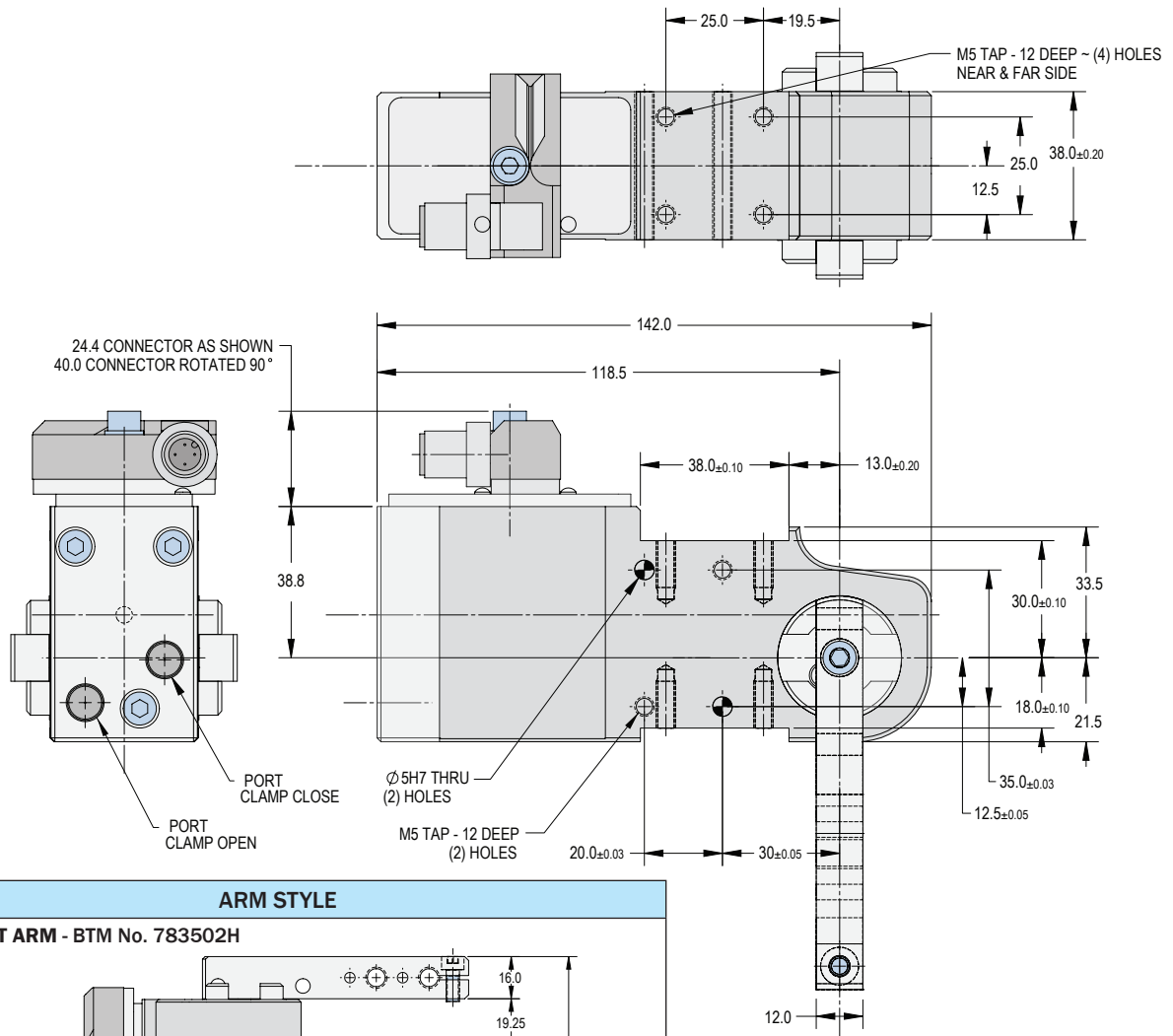


PORT OPTION	
N	1/8 NPT
G	G1/8
CLAMP ASSEMBLY	
Arm Opening	BTM Number
35°	PD217700A
50°	PD217700B
65°	PD217700C
80°	PD217700D
95°	PD217700E
110°	PD217700F
120°	PD217700G



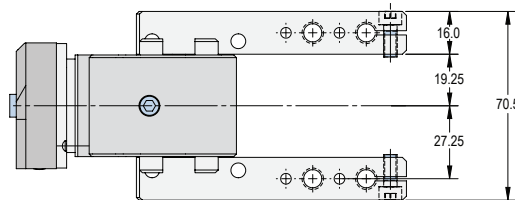
HOW TO ORDER

CLAMP					LEFT ARM				RIGHT ARM				OFFSET ARM MOUNTING		SWITCH
TPC	32	N	120	-	783502H	90A	L	-	783502H	90A	R	-	OAM	-	BDC
CLAMP SERIES --	CLAMP SIZE --	PORT OPTION --	ARM OPENING --		ARM STYLE --	ARM POSITION --	ARM SIDE --		ARM STYLE --	ARM POSITION --	ARM SIDE --		OFFSET ARM MOUNT -- (leave blank for normal mounting)		SWITCH CODE --



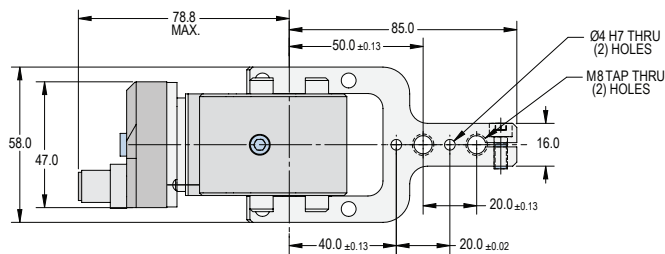
ARM STYLE

STRAIGHT ARM - BTM No. 783502H



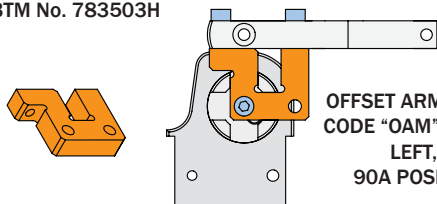
Note: Please see "Yoke Arm" Below for dimensions not shown.

YOKE ARM - BTM No. 783501H



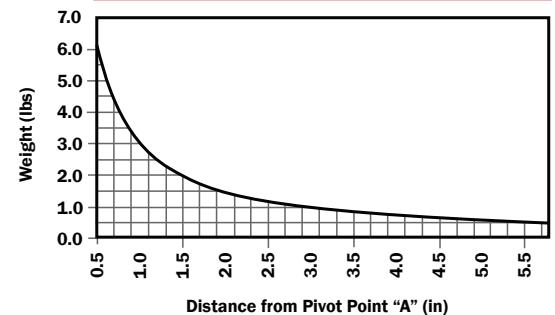
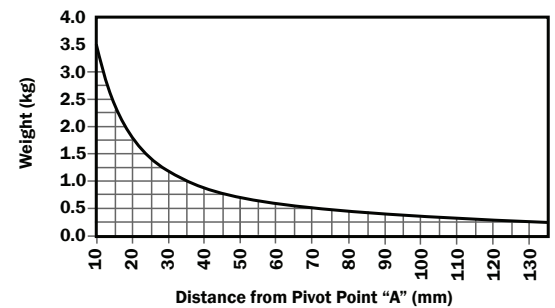
OFFSET ARM MOUNTING (OAM) OPTION

OAM OPTION - BTM No. 783503H



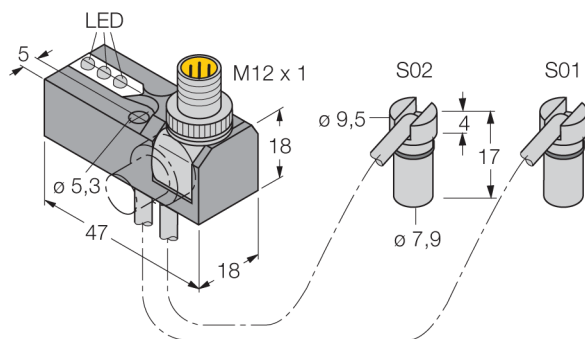
OFFSET ARM MOUNT ORDER CODE "OAM" MOUNTS RIGHT, LEFT, OR DUAL 90A POSITION SHOWN

MAX. WEIGHT ALLOWABLE ON CLAMP ARM

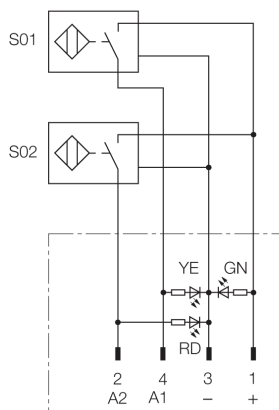


BDC - TURCK DC

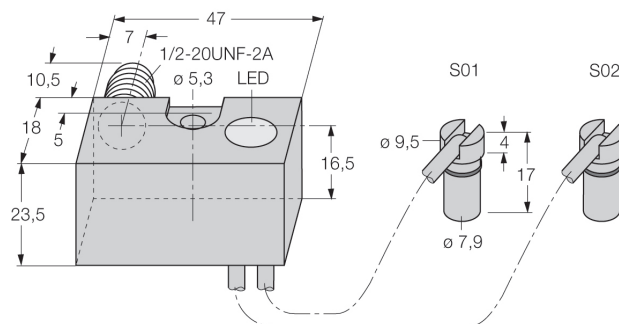
Ni2-BTM-0,16-BDS-2AP6X3-H1141/S34


LED INDICATORS

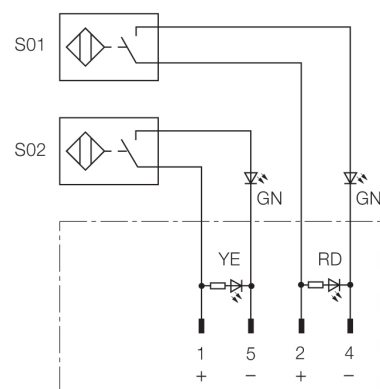
YELLOW - S01 OUTPUT ENERGIZED
 GREEN - POWER ON
 RED - S02 OUTPUT ENERGIZED


BAC - TURCK AC

Ni2-BTM-0,16-BA-2ADZ32X4-B3151/S34


LED INDICATORS

YELLOW - S01 OUTPUT ENERGIZED
 GREEN - POWER ON
 RED - S02 OUTPUT ENERGIZED


SPECIFICATIONS

RATED OPERATING DISTANCE S_n	2mm
MOUNTING MODE	NON-FLUSH
HYSTERESIS H (DIFFERENTIAL TRAVEL)	3 - 15%
MAX. RELATIVE TEMPERATURE DRIFT	$\leq \pm 10\%$
MIN. REPEAT ACCURACY	$\leq 2\%$
OPERATION TEMPERATURE	-25°C to +70°C (-13°F to +158°F)
RATED OPERATIONAL VOLTAGE (DC) U_o	10-30 VDC
MAX. RIPPLE	$\leq 10\% U_{ss}$
RATED OPERATIONAL CURRENT (DC) I_o	≤ 200 mA
NO-LOAD CURRENT I_o	≤ 15 mA
MAX. OFF-STATE CURRENT	$\leq 0,1$ mA
MAX. SWITCHING FREQUENCY	$\leq 0,03$ kHz
RATED INSULATION VOLTAGE	0,5 kV
OUTPUT FUNCTION	4-WIRE, NORMALLY OPEN, PNP
SHORT-CIRCUIT PROTECTION	YES
MAX. VOLTAGE DROP AT I_o	$\leq 1,8$ V
WIRE BREAKAGE AND REVERSE POLARITY PROTECTION	YES, COMPLETE
DEGREE OF PROTECTION	IP 67
HOUSING STYLE	DUAL SENSOR; BTM
DIMENSIONS	47 X 18 X 18mm (1.85" X .71" X .71")
HOUSING MATERIAL	PLASTIC, PBT-GF20-V0
WIRING	CONNECTOR, M12X1 EUROCON
CABLE	Ø 2; LiF9Y-11Y3; PUR; 0,16 m
CROSS SECTION	3 X 0,08mm ²
VIBRATION RESISTANCE	55 Hz (1 mm)
SHOCK RESISTANCE	30 X g (11 ms)

SPECIFICATIONS

RATED OPERATING DISTANCE S_n	2mm
MOUNTING MODE	NON-FLUSH
HYSTERESIS H (DIFFERENTIAL TRAVEL)	3 - 15%
MAX. RELATIVE TEMPERATURE DRIFT	$\leq \pm 10\%$
MIN. REPEAT ACCURACY	$\leq 2\%$
OPERATION TEMPERATURE	-25°C to +70°C (-13°F to +158°F)
RATED OPERATIONAL VOLTAGE (AC) U_o	20-250 VAC
RATED OPERATIONAL VOLTAGE (DC) U_o	10-300 VDC
RATED OPERATIONAL CURRENT (AC) I_o	≤ 100 mA
RATED OPERATIONAL CURRENT (DC) I_o	≤ 100 mA
MAX. OFF-STATE CURRENT	$\leq 1,7$ mA
MAX. SWITCHING FREQUENCY	≤ 0.03 kHz
RATED INSULATION VOLTAGE	1,5 kV
OUTPUT FUNCTION	4-WIRE, 2 X NORMALLY OPEN
MAX. VOLTAGE DROP AT I_o	≤ 6 V
MIN. OPERATIONAL CURRENT I_m	3 mA
DEGREE OF PROTECTION	IP 67
HOUSING STYLE	DUAL SENSOR; BTM
DIMENSIONS	47 X 18 X 18mm (1.85" X .71" X .71")
HOUSING MATERIAL	PLASTIC, PBT-GF20-V0
WIRING	CONNECTOR, M12X1 EUROCON
CABLE	Ø 2; LiF9Y-11Y3; PUR; 0,16 m
CROSS SECTION	3 X 0,08mm ²
VIBRATION RESISTANCE	55 Hz (1 mm)
SHOCK RESISTANCE	30 X g (11 ms)

WARRANTY INFORMATION

BTM Company, LLC. warrants its TPC-32 Clamps against defects in material and workmanship for the life of the tool/program for which the clamp was originally sold or one million cycles, whichever comes first.

This warranty is limited to replacing or repairing at BTM's option, F.O.B. BTM's factory, any part found by BTM to be defective in materials and/or workmanship. Any application of a BTM product outside the intended use of the product shall not be warranted by BTM Company, LLC. Furthermore, BTM will not be liable for any expenses incurred for repairs or replacement made outside BTM's facilities without written consent (or damages arising out of such replacements or repairs). Under no circumstances will BTM be held responsible for any consequential damages.

The warranty is limited to the repair or replacement of the defective part(s) and does not include installation.

This warranty is the only warranty extended by the seller in connection with any sale made hereunder and is in lieu of all other warranties, express, implied or statutory including warranties of merchantability and fitness for purpose.



OTHER PRODUCTS FOR AUTOMATION

Clamps



From heavy duty precision sealed locking power clamps to simple light duty OMNI models, BTM manufactures clamps in a range of styles and sizes for a wide variety of applications.

Grippers



BTM manufactures a high quality line of grippers ranging from heavy duty models to light duty models in a variety of styles and sizes.

OTHER QUALITY BTM PRODUCTS TO CONSIDER

Pin Locator Clamps



BTM's Locator Clamps are ideal for locating & holding production material and are used in a variety of manufacturing areas including automotive & refrigeration.

Pin Sizes range from as small as 6mm (PLC-25 Light Duty Clamp) to as large as 40mm (PLC-63 & LPLC-38 locking clamp).

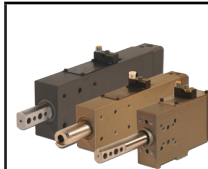
Single Finger Hook Models (without the locating pin) are also available in both locking and non-locking configurations.

Rod-Locking Pin Locator Clamps



These clamps employ a rod locking feature which allows the clamp to retain the part when air pressure is removed/lost.

Precision Shot Pin Cylinders



BTM's Precision Shot Pin Cylinders are ideal for locating production material through precisely pierced holes - including clamping and fixturing.



For more information, or to view our other products, please visit:

www.BTMCOMP.COM