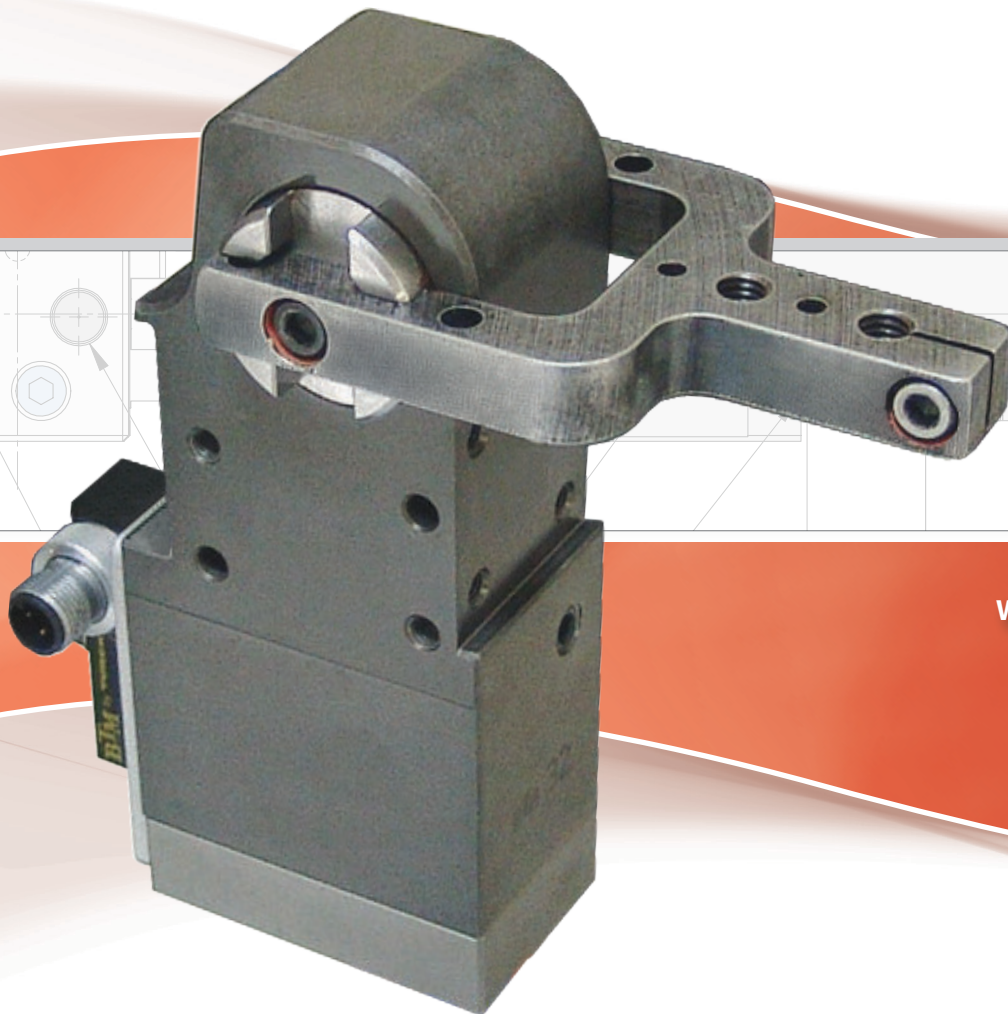


TPC-32 Power Clamp

Sealed pneumatic precision locking Power Clamp



Various arms and arm mounting options

Uses a TRILOK locking mechanism

Compact and light weight

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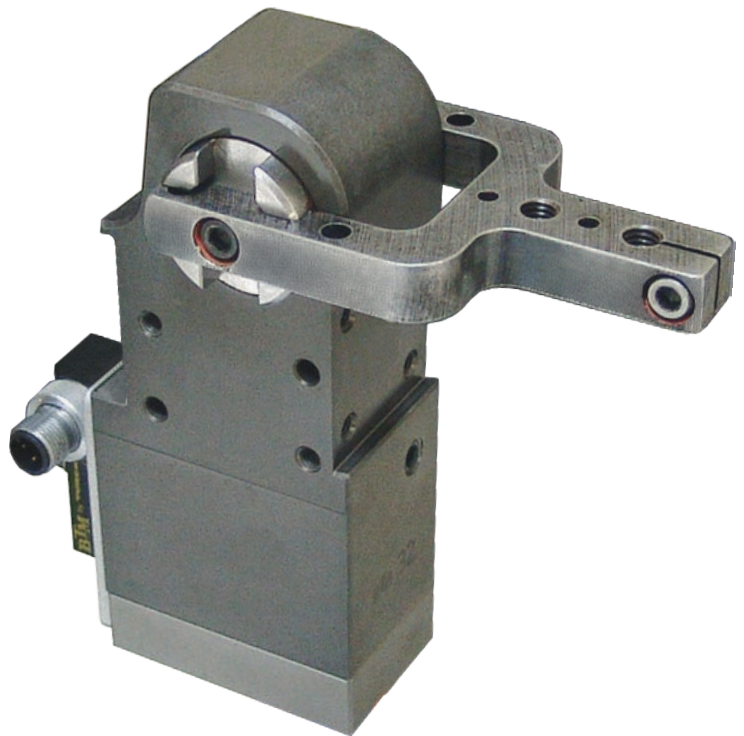
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BTM's TPC-32 features a 32mm bore, and a three point locking mechanism which is designed to remain locked even if air pressure is lost. This clamp is compact, light weight, and sealed.

TPC-32 CLAMP FEATURES

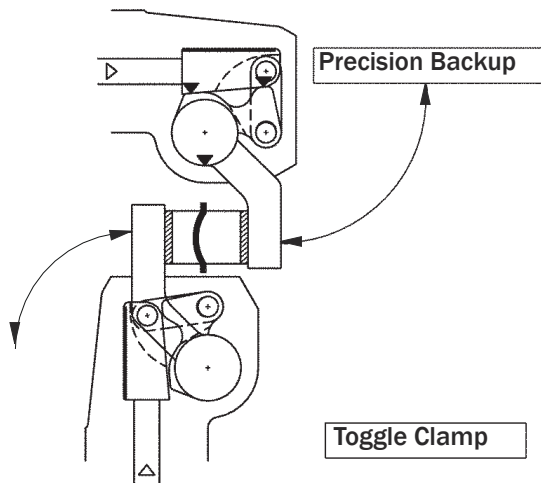
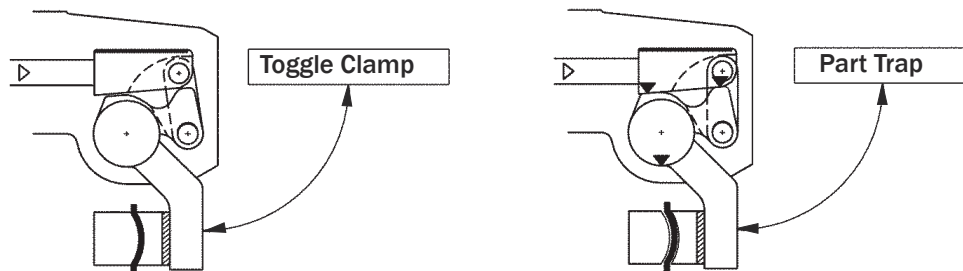
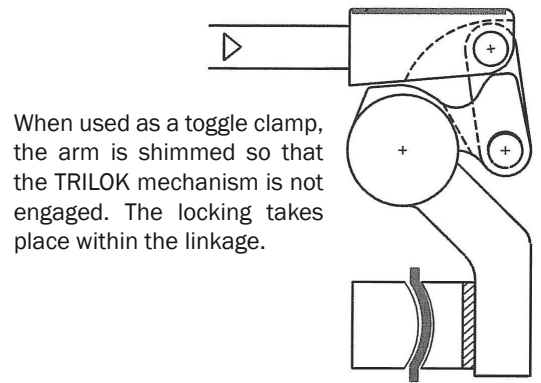
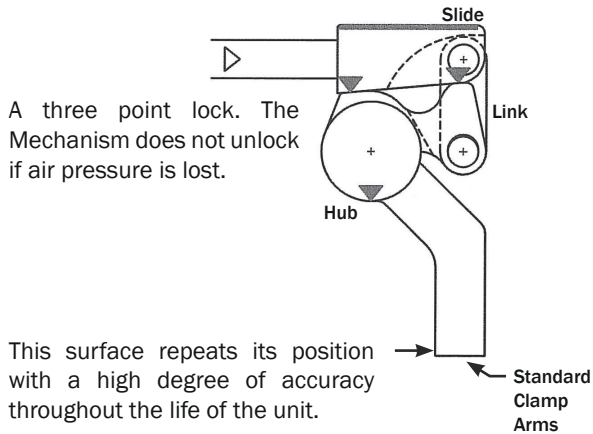
- Patented TriLok Mechanism
- Sealed Mechanism - Lubricated for Life of Clamp
- Integral Cylinder with Heavy Wall
- Body is constructed of Aircraft Aluminum, Hard coated to a Rockwell C-70 for Excellent Wear Characteristics
- One clamp model for single and dual arm clamps
- Access to manually unlock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



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.

TPC-32 CLAMPS UTILIZE PATENTED **TriLok** TECHNOLOGY

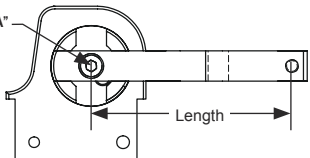
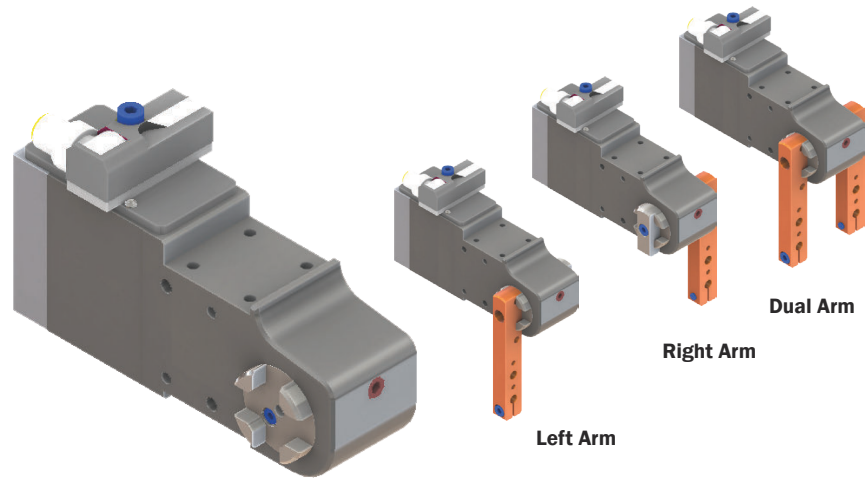


TPC-32

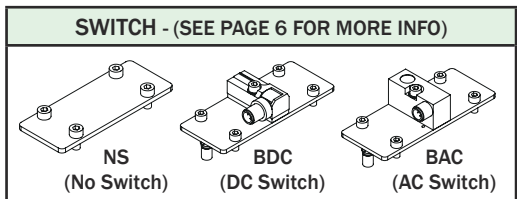
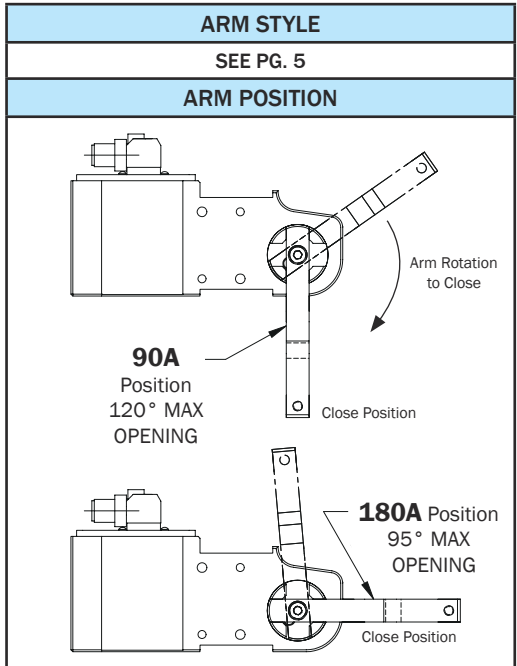
CLAMP SPECIFICATIONS

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		PIVOT POINT "A"
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	

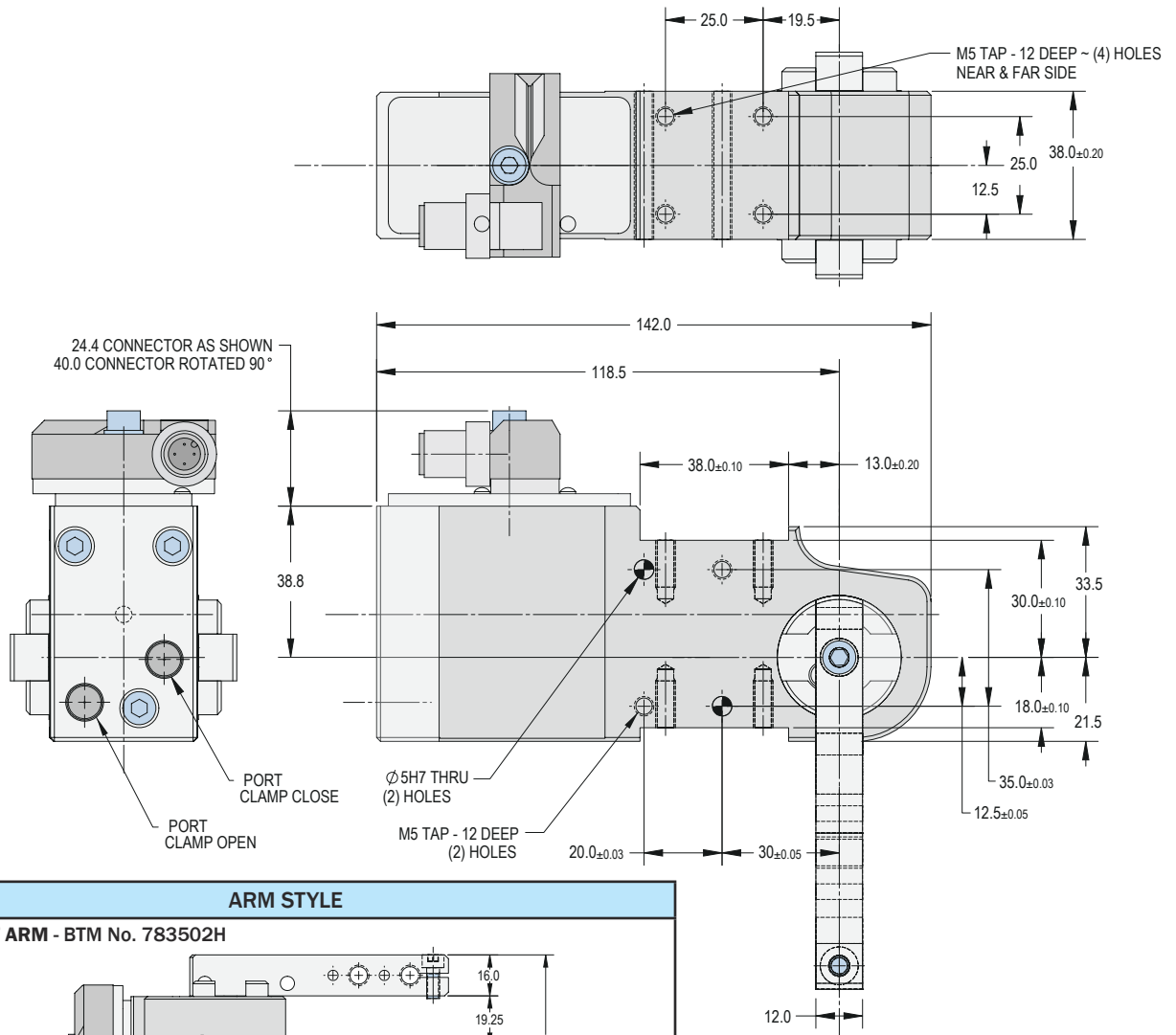



PORT OPTION	
N	1/8 NPT
G	G1/8
CLAMP ASSEMBLY	
Arm Opening	BTM Number
35°	PD217700A
50°	PD217700B
65°	PD217700C
80°	PD217700D
95°	PD217700E
110°	PD217700F
120°	PD217700G



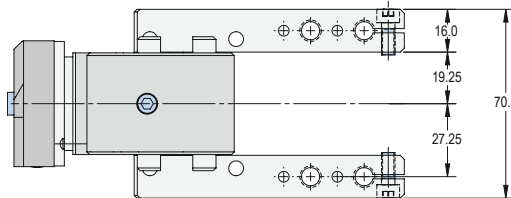
HOW TO ORDER

CLAMP				LEFT ARM			RIGHT ARM			OFFSET ARM MOUNTING	SWITCH
TPC	32	N	125	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



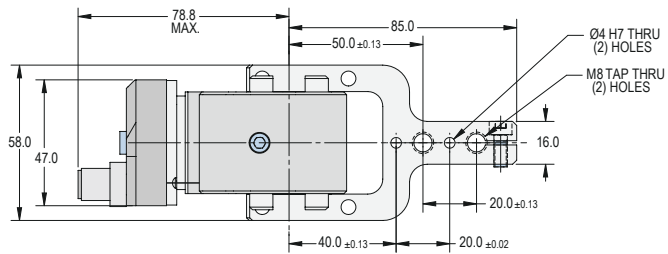
ARM STYLE

STRAIGHT ARM - BTM No. 783502H

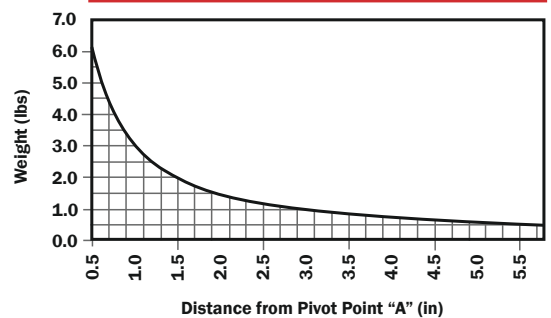
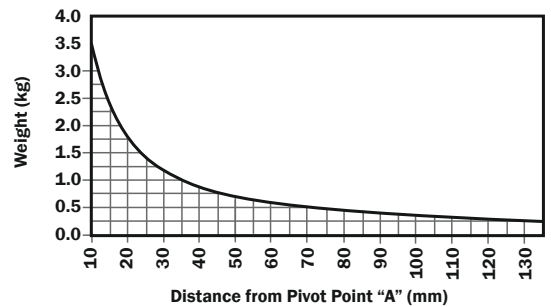


Note: Please see "Yoke Arm" Below for dimensions not shown.

YOKE ARM - BTM No. 783501H

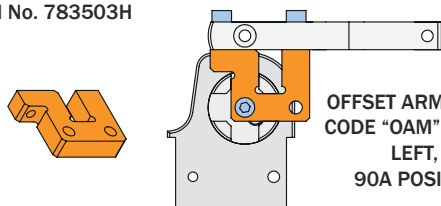


MAX. WEIGHT ALLOWABLE ON CLAMP ARM



OFFSET ARM MOUNTING (OAM) OPTION

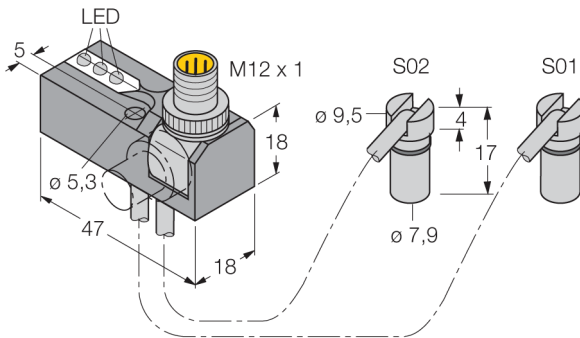
OAM OPTION - BTM No. 783503H



TPC-32 Clamp Switch Information

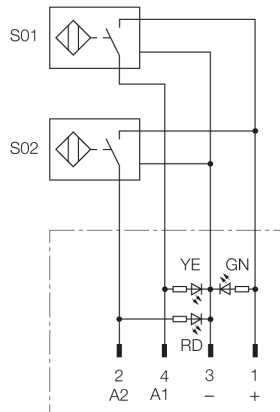
BDC - TURCK DC

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



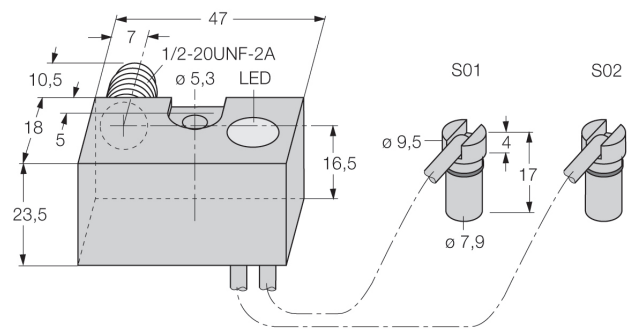
LED INDICATORS

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



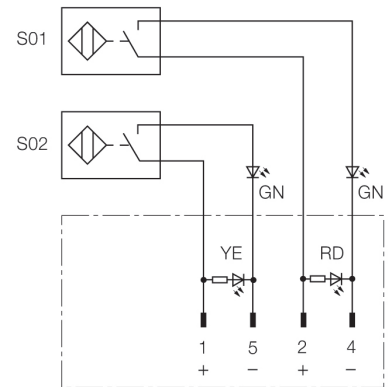
BAC - TURCK AC

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-VO
WIRING	CONNECTOR, M12X1 EUROCON
CABLE	$\varnothing 2$; 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	$\leq 0,03$ 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-VO
WIRING	CONNECTOR, M12X1 EUROCON
CABLE	$\varnothing 2$; 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 Corporation 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 Corporation. 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.

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BTM[®] EUROPE

BTM has a wide range of standard products to meet your needs including:

PNEUMATIC CLAMPS & GRIPPERS

Light & Heavy Duty Clamps

Clamps range from light duty omni-directional head clamps to heavy duty precision sealed power clamps.



Light & Heavy Duty Grippers

BTM's Gripper line ranges from compact light duty models to locking & non-locking heavy duty models.



PIN PRODUCTS

Precision Shot Pin cylinders

BTM's Precision Part Locators are used whenever your production needs require locating precise holes in a workpiece.



Pin Locator Clamps

BTMs' Pin Locator Clamps and Single Finger clamps are used in stationary part nests, welding fixtures, transfer systems, robot end effectors and numerous other clamping applications. These clamps locate and hold the work while other operations are performed.



Standard pin sizes range from 12.5mm - 40mm.

SHEET METAL JOINING

Tog-L-Loc[®]

BTM's Tog-L-Loc[®] sheet metal joining system is a cold forming process that quickly joins pre-painted, galvanized, coated, and dissimilar metals.



Lance-N-Loc[™]

BTM's Lance-N-Loc[™] Joining System produces clean, strong and consistent joints in most coated or uncoated metals.



Ways to Tog-L-Loc[®]



Press Brakes



Handheld Units



Die Sets



Universal Presses



Hydraulic Units



Specialized Units

For more information, or to see our full line of products, please visit:

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