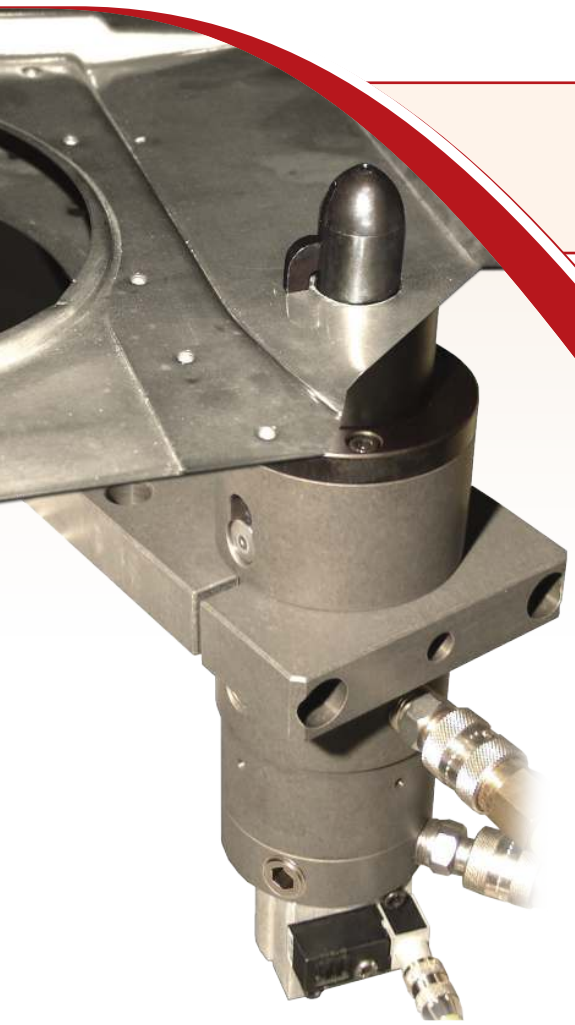
PIN & HOOK CLAMPS

Reduce cost by clamping through holes, slots or along edges.



Pin Clamps *locate, **AND** clamp through holes or slots*

Hook Clamps *offer reduced cost, simple clamping through holes, slots, or along edges*

PLC25 PLC45 PLC63 (Shown) SFC63 RLPC45 RLPC63 (Shown) RLSFC63 LPLC-38 (Shown) LPLC-38M LSFC-38

View our Pin & Hook Clamp Line of Products Online!

www.btm-europe.de

BTM® EUROPE

www.btm-europe.de

SAFETY NOTE

Customer is responsible for the safe operation and use of the products shown in this literature.

INTRODUCTION

BTM Pin Clamps reduce cost by both accurately locating through datum holes and clamping a part with one device. XYZ location register is achieved by incorporating a clamping finger or hook inside the locator pin thereby eliminating expensive swing arm power clamps.

The less expensive Hook Clamps are used when accurate part location is not required.

BTM Hook Clamps provide simple clamping through holes, slots or along edges further reducing cost. Hooked style fingers clamp over flanged holes.

Pin Clamps and Hook Clamps come in 3 types: **Clamping**, **Retaining**, and **Locking**.

Clamping – PLC and SFC – Air pressure on a piston multiplies the force required to clamp the part to the net surface.

Retaining - RLPC and RLFPC – Air pressure applies both clamping force and retracts a spring loaded rod locker, which upon loss of air engages the finger/hook to retain the clamped part. This light weight and compact clamp is best for material handling and robotic EOAT.

Locking – LPLC and LSFC – A patented air driven cam mechanism maintains clamp force upon removal of air making this clamp ideal for moving fixtures. Clamp force is available within the last 3mm of finger/hook travel making this clamp ideal for clamping multiple part thicknesses.

All BTM Pin and Hook clamps feature 90° positioning of the finger/hook to avoid part obstructions or weld spatter. Round body clamps feature full 360° positioning of the finger/hook.

HOW THEY WORK

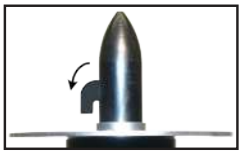
PIN CLAMPS (PLC, LPLC, RLPC)

STEP ONE

With the clamp finger retracted, the part is loaded over the locating pin.

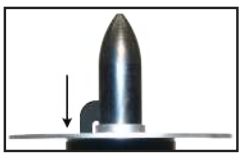
STEP TWO

The material rests on the clamp Rest Block (“Donut”).



STEP THREE

The finger swings out of the locating pin with 5mm of rotational travel.



STEP FOUR

The finger has 10mm of straight travel. LPLCs clamp and lock in the last 3mm.

HOOK CLAMPS (SFC, LSFC, RLSFC)

STEP ONE

The part is loaded over the retracted finger and rests on the clamp rest block “donut”.

STEP TWO

The finger swings in the direction of its clamping surface with 5mm of rotational travel.

STEP THREE

The finger has 10mm of straight travel. LSFCs clamp and lock in the last 3mm.

! BTM reserves the right to make changes to its literature without any prior notice.
Go to www.btm-europe.de for latest version.

TABLE OF CONTENTS

NON-LOCKING MODELS

PLC25 Light Duty Pin Locating Clamp 4-5

Hole/Slot Range	6mm-12.00mm
Clamping Force	231N @ 5.5BAR (52lbf @ 80PSI)

Features
- Compact & Light Weight
- 25mm bore pneumatic cylinder
- Magnetic Position Sensing Switch Option

PLC45 Pin Locating Clamp 6-7

Hole/Slot Range	12.50mm-18.00mm
Clamping Force	578N @ 5.5BAR (130lbf @ 80PSI)

Features
- Clamps on top of a flange.

PLC63 Pin Locating Clamp 8-9

Hole/Slot Range	18.00mm-40.00mm
Clamping Force	1334N @ 5.5BAR (300lbf @ 80PSI)

Features
- Finger relief for flanged hole clearance (25mm, 30mm, 40mm)

SFC63 Hook Clamp 10-11

Hole/Slot Range	18.00mm-40.00mm
Clamping Force	1334N @ 5.5BAR (300lbf @ 80PSI)

Features
- A single clamp finger without a locating pin.

LOCKING MODELS

RLPC45 & 63 Rod-Locking Pin Locator Clamps 12-13

	RLPC45	RLPC63
Hole/Slot Range	12.50mm-18.00mm	18.00mm-40.00mm
Clamping Force	578N @ 5.5BAR (130lbf @ 80PSI)	1334N @ 5.5BAR (300lbf @ 80PSI)

Features
- Retains the part when air pressure is removed or lost.
- Finger relief for flanged hole clearance (25mm, 30mm, 40mm)

RLSFC63 Rod-Locking Hook Clamp 14-15

Hole/Slot Range	18.00mm-40.00mm
Clamping Force	1334N @ 5.5BAR (300lbf @ 80PSI)

Features
- Retains the part when air pressure is removed or lost.
- A single clamp finger without a locating pin.

LPLC38 Locking Pin Locator Clamp 16-17

Hole/Slot Range	18.00mm-40.00mm
Clamping Force	900 - 1334N @ 5.5BAR (200 - 300lbf @ 80PSI)

Features
- Maintains clamping force when locked, even if air pressure is removed or lost.
- Finger relief for flanged hole clearance (25mm, 30mm, 40mm)

LSFC38 Locking Hook Clamp 18-19

Hole/Slot Range	18.00mm-40.00mm
Clamping Force	900 - 1334N @ 5.5BAR (200 - 300lbf @ 80PSI)

Features
- Maintains clamping force when locked, even if air pressure is removed or lost.
- A single clamp finger without a locating pin.

LPLC38M Manual Locking Pin Clamp 20-21

Mounting Information 22
Switch Information 23
Warranty Information ..... Back Cover

PLC25 *LIGHT DUTY* PIN CLAMP

A non-locking light duty pin locator clamp designed to clamp through small holes or slots.

Hole/Slot Size	6mm - 12mm
Clamping Force	222N @ 5.5BAR (50lbf @ 80PSI)
Finger Travel	6mm [0.24"] Total Consists of: • 3mm [0.12in] rotational • 3mm [0.12in] straight line pull down stroke
Bore Diameter	25.4mm [1.00in]
Cylinder Stroke	7.0mm [0.28in]
Recommended Operating Pressure	4.0 - 6.9 BAR [60 - 100 PSI]
Approximate Weight	0.28 kg [0.62 lbs] (depending on pin size)

Open Position

Closed Position

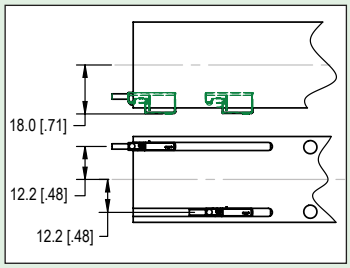
HOW TO ORDER

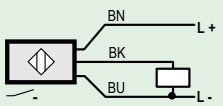
Email info@btm-europe.de to request a quote!

CLAMP SELECTION		PIN SELECTION		SENSING		ASSEMBLY NUMBER
PLC25	-	6.00	-	MPEDC	-	PD226300A
CLAMP SERIES		PIN DIAMETER		SENSING OPTION		INCLUDE STANDARD BTM NUMBER *OR* SPECIAL NUMBER
		6.00		**MPEDC** = Efector DC Magnetic Position Sensing Switch (Note: 2 switches included & required)		
		8.00		**MPBDC** = Balluf DC Magnetic Position Sensing Switch (Note: 2 switches included & required)		
		10.00		**NS** = No Switch		
		12.00				
		See p. 5				

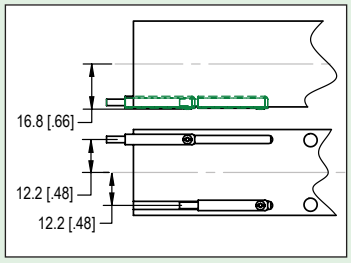
Pin Dia. (h7)	BTM Number
6.00	**PD226300A**
8.00	**PD226500A**
10.00	**PD226700A**
12.00	**PD226900A**

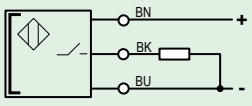
MPEDC - EFECTOR DC
BTM NO. 041424



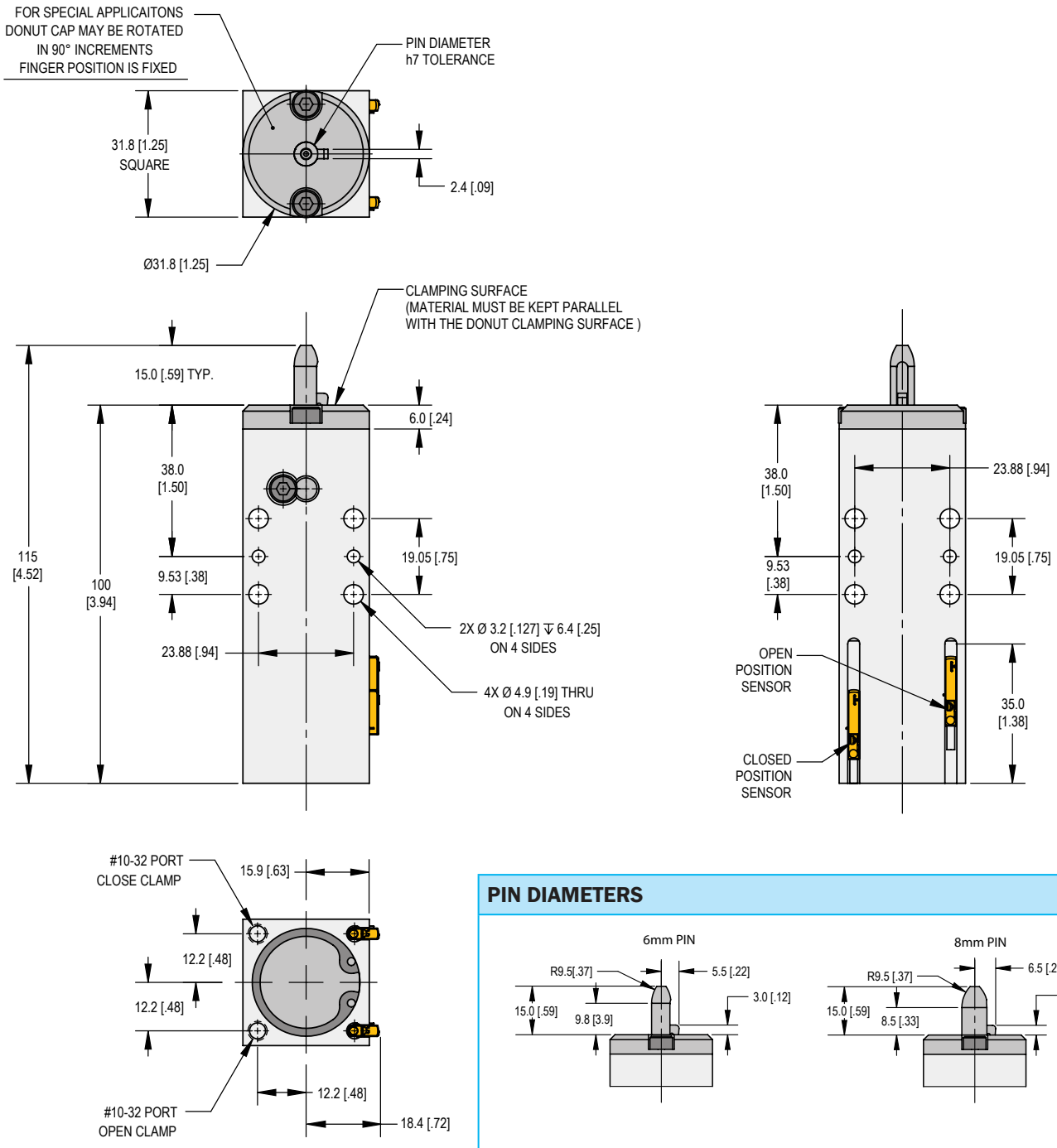


MPBDC - BALLUF DC
BTM NO. 043828

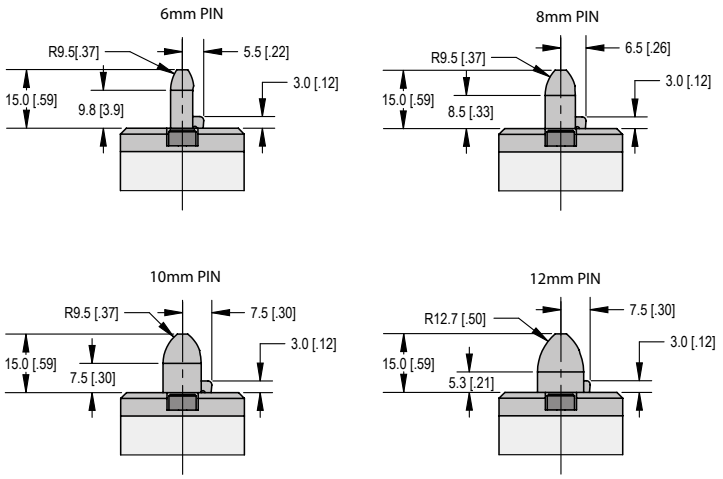




PLC25 *LIGHT DUTY* PIN CLAMP



PIN DIAMETERS

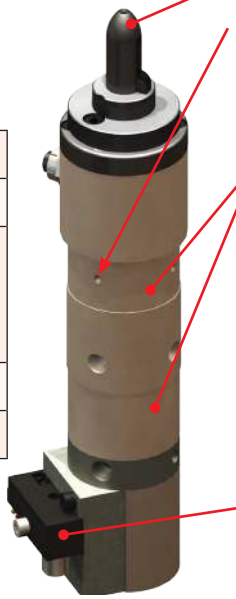


NOTE: BTM Pin Clamps can be ordered with custom designed (non-standard) pins, donuts, and/or fingers. In such instances, a SPECIAL OPTION number will be issued by BTM's Product Engineering Department. This number must be referenced when ordering a non-standard pin clamp.

PLC45 PIN CLAMP

A non-locking pin locator clamp designed to clamp through holes or slots.

Hole/Slot Size	12.5mm - 18mm
Clamping Force	578N @ 5.5BAR [130lbf @ 80PSI]
Finger Travel	15mm [0.590in] Total. Consists of: • 5mm [0.197in] rotational • 10mm [0.394in] straight line pull down stroke
Bore Diameter	44.5mm [1.75in]
Cylinder Stroke	15.0mm [0.59in]



Hardened pin Rc 58-62

90° Positive Locating Detents for Spring Locator in Standard Blade Mount.
(4) locations

360° Mounting Surface
(2) locations

p. 22 for Blade Mount

World Switch Package
Can be mounted in four different orientations on PLC45 clamps.

HOW TO ORDER

Email info@btm-europe.de to request a quote!

CLAMP SELECTION		PIN SELECTION			SENSING	SPECIAL ASSEMBLY NUMBER
PLC45	N	13.00	PT	BL	PDC	XXXXXXX
CLAMP SERIES	PORT OPTION	PIN DIAMETER	PIN STYLE	PIN COATING		

PORT OPTION
- **N =** 1/8 NPT
- **G =** G1/8

PIN DIAMETER

Diameter	Clamp Weight
12.80	1.55kg [3.41lbs]
13.00	1.55kg [3.41lbs]
15.80	1.56kg [3.44lbs]
16.00	1.56kg [3.44lbs]

See p.7

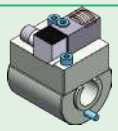
Additional pin diameters ranging from 12.5 - 18mm are available, but are not standard. Contact BTM for more information.

PIN STYLE
- **PT =** Tapered Pin

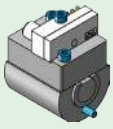
PIN COATING
- **BL =** Black Oxide

SENSING

NS
(No Switch)



PDC
(Pepperl + Fuchs® DC)
[Optional]



TDC
(Turck DC)
[Optional]

See p. 23

Other switch brands are available. Contact BTM for details.

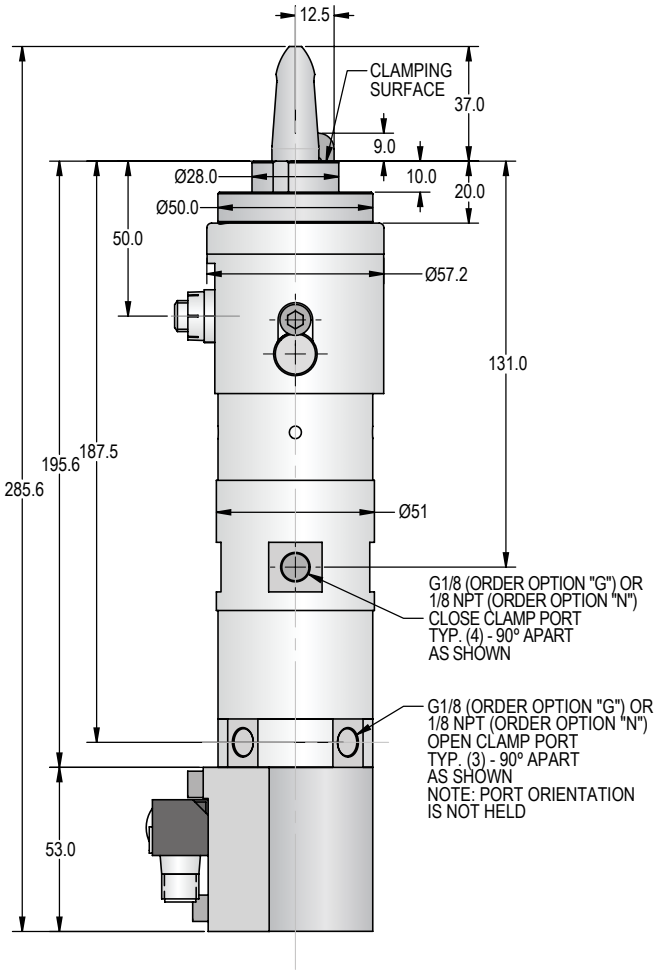
WE DO SPECIALS!

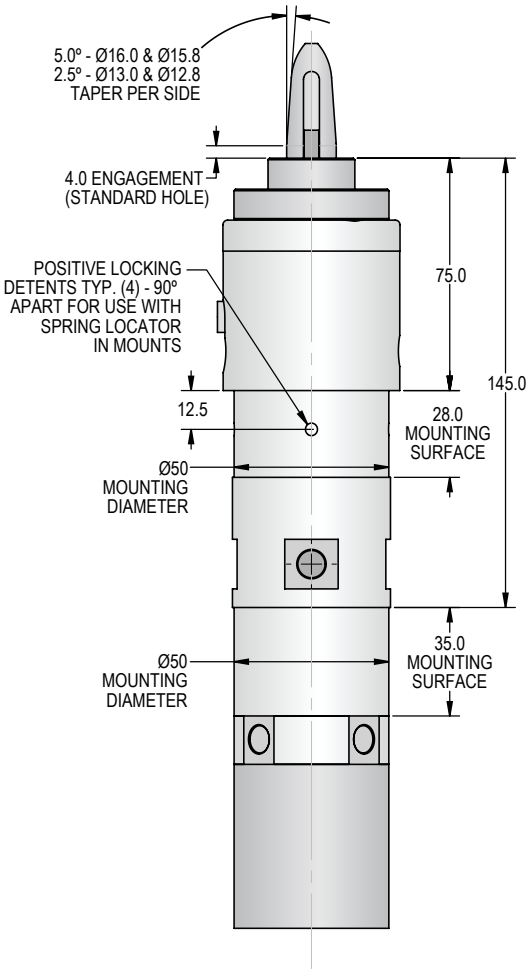
BTM Pin Clamps can be ordered with custom designed (non-standard) pins, donuts, and/or fingers. In such cases, a **SPECIAL ASSEMBLY** number will be issued by BTM's Product Engineering Department. This number must be referenced when ordering a non-standard pin clamp.

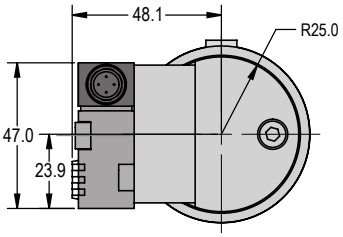
Example of a special "donut"

Example of a special pin

PLC45 PIN CLAMP

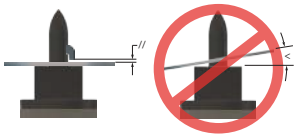






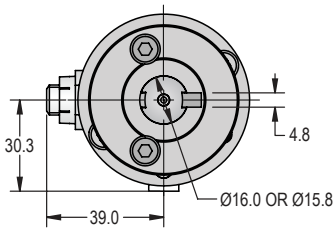
Note: If the PLC45 clamp is used on a flanged hole, the finger will clamp on top of the flange.

NOTE

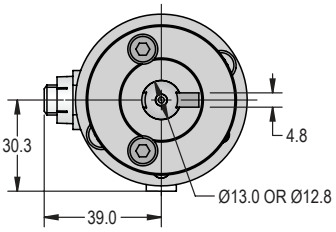


The material must be kept parallel with the rest block's clamping surface when loading over the pin.

PIN DIAMETERS



Ø16.0 AND Ø15.8 PINS



Ø13.0 AND Ø12.8 PINS

PLC63 PIN CLAMP

A non-locking pin locator clamp designed to clamp through holes or slots.

Hole/Slot Size	18mm - 40mm
Clamping Force	1334N @ 5.5BAR [300lbf @ 80PSI]
Finger Travel	15mm [0.590in] Total. Consists of: • 5mm [0.197in] rotational • 10mm [0.394in] straight line pull down stroke
Bore Diameter	63mm [2.50in]
Cylinder Stroke	15.0mm [0.59in]

Hardened Pin Rc 58-62

90° Positive Locating Detents for Spring Locator in Standard Blade Mount.
(8) locations

360° Mounting Surface
(2) locations

p. 22 for Blade Mount

World Switch Package
Can be mounted in four different orientations on PLC63 clamps.

MANUAL OPERATION AVAILABLE
(*CONTACT BTM* FOR INFORMATION)

HOW TO ORDER

Email info@btm-europe.de to request a quote!

CLAMP SELECTION		PIN SELECTION				SENSING	SPECIAL ASSEMBLY #
PLC63	- N	- 20.00	- PT	- SH	- BL	- PDC	- XXXXXXX

CLAMP SERIES

PLC63

PORT OPTION

N = 3/8 NPT

G = G1/4

PIN DIAMETER

Diameter	Clamp Weight	Flange Hole Option?
19.80	3.04kg [6.70lbs]	No
20.00	3.04kg [6.70lbs]	No
24.80	3.08kg [6.80lbs]	Yes
25.00	3.08kg [6.80lbs]	Yes
29.80	3.86kg [8.52lbs]	Yes
30.00	3.86kg [8.52lbs]	Yes
34.80	3.92kg [8.65lbs]	No
35.00	3.92kg [8.65lbs]	No
39.80	3.99kg [8.79lbs]	Yes
40.00	3.99kg [8.79lbs]	Yes

See p.9

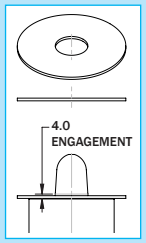
Additional pin diameters are available, but are not standard. Contact BTM for more information.

PIN STYLE

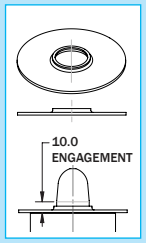
PT = Tapered Pin

HOLE TYPE

SH = Standard



FL = Flanged



FL *only* available on 25-24.8, 30-29.8, and 40-39.8mm sizes

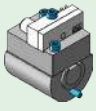
PIN COATING

BL = Black Oxide

SENSING

NS (No Switch)

PDC (Pepperl + Fuchs® DC) *[Optional]*



TDC (Turck DC) *[Optional]*

See p. 23

Other switch brands are available. Contact BTM for details.

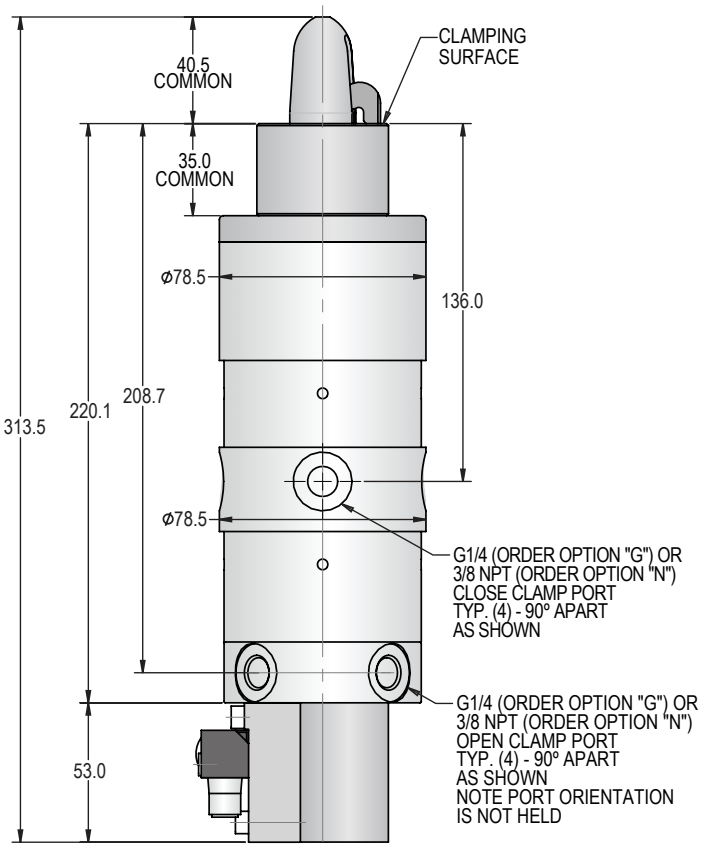
SPECIAL ASSEMBLY

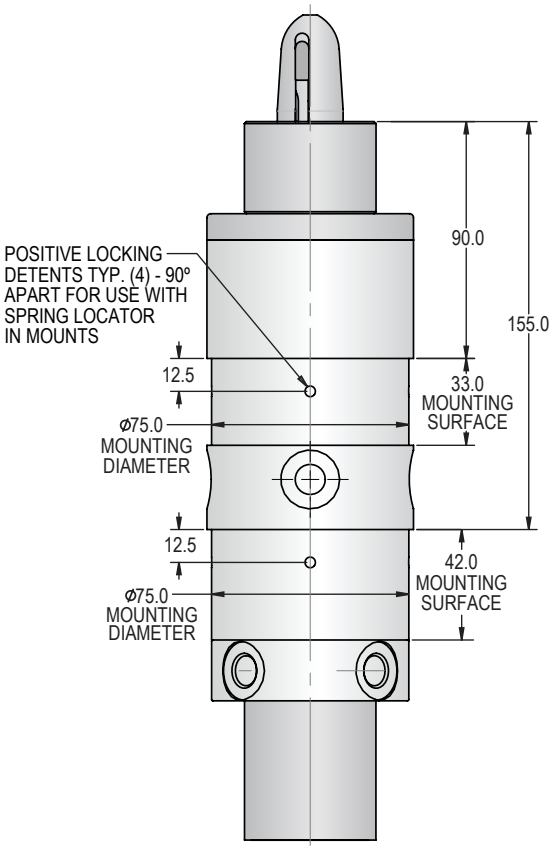
WE DO SPECIALS!

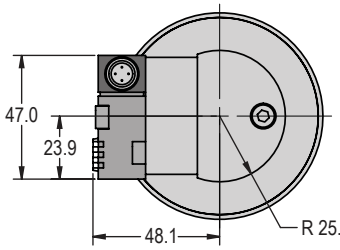
BTM Pin Clamps can be ordered with custom designed (non-standard) pins, donuts, and/or fingers. In such cases, a **SPECIAL ASSEMBLY** number will be issued by BTM's Product Engineering Department. This number must be referenced when ordering a non-standard pin clamp.

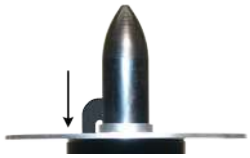
Example of a special "donut"

PLC63 PIN CLAMP



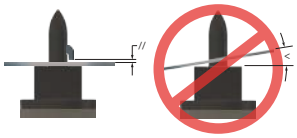






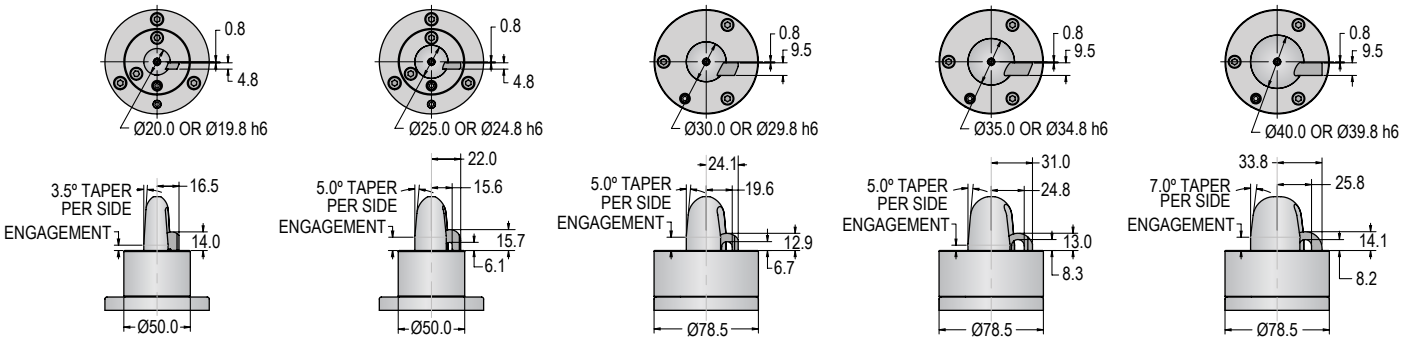
Note: If the PLC63 clamp is used on a flanged hole, the finger will clamp over of the flange. (25mm, 30mm, and 40mm only)

NOTE



The material must be kept parallel with the rest block's clamping surface when loading over the pin.

PIN DIAMETERS



Ø20.0 AND Ø19.8 PINS	Ø25.0 AND Ø24.8 PINS	Ø30.0 AND Ø29.8 PINS	Ø35.0 AND Ø34.8 PINS	Ø40.0 AND Ø39.8 PINS
HOLE TYPE: SH ONLY	**FL/SH AVAILABLE**	**FL/SH AVAILABLE**	**SH ONLY**	**FL/SH AVAILABLE**

SFC63 HOOK CLAMP

A non-locking single finger clamp designed to clamp through holes or slots.

Hole/Slot Size	18mm - 40mm
Clamping Force	1334N @ 5.5BAR [300lbf @ 80PSI]
Finger Travel	15mm [0.590in] Total. Consists of: • 5mm [0.197in] rotational • 10mm [0.394in] straight line pull down stroke
Bore Diameter	63mm [2.50in]
Cylinder Stroke	15.0mm [0.59in]

90° Positive Locating Detents for Spring Locator in Standard Blade Mount.
(8) locations

360° Mounting Surface
(2) locations

p. 22 for Blade Mount

World Switch Package
Can be mounted in four different orientations on SFC63 clamps.

MANUAL OPERATION AVAILABLE
(*CONTACT BTM* FOR INFORMATION)

HOW TO ORDER

Email **info@btm-europe.de** to request a quote!

CLAMP SELECTION		HOLE/SLOT RANGE	SENSING	SPECIAL ASSEMBLY NUMBER
SFC63	- N	- 40-30	- PDC	- XXXXXXX

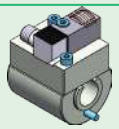
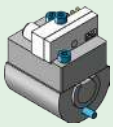
CLAMP SERIES

PORT OPTION

N = 3/8 NPT
G = G1/4

Diameter	Clamp Weight
29-18	2.70kg [5.96lbs]
40-30	3.52kg [7.77lbs]

See p.11

	NS (No Switch)
	**PDC** (Pepperl + Fuchs® DC) *[Optional]*
	**TDC** (Turck DC) *[Optional]*

See p. 23

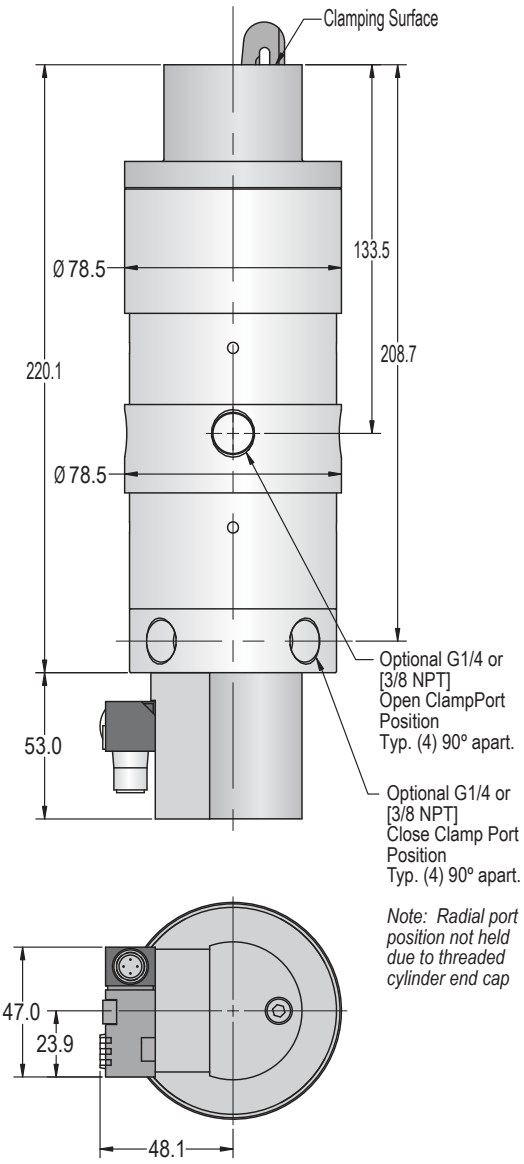
Other switch brands are available. Contact BTM for details.

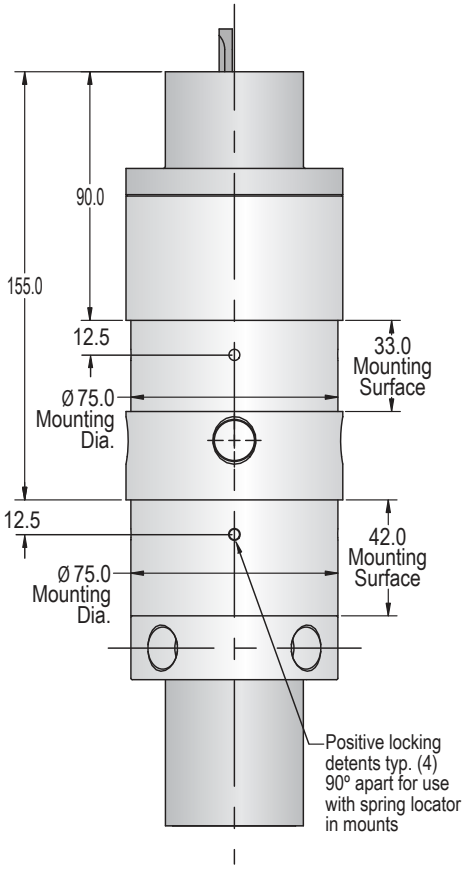
WE DO SPECIALS!

BTM Single Finger (Hook) Clamps can be ordered with custom designed (non-standard) donuts, and/or fingers. In such cases, a **SPECIAL ASSEMBLY** number will be issued by BTM's Product Engineering Department. This number must be referenced when ordering a non-standard single finger (hook) clamp.

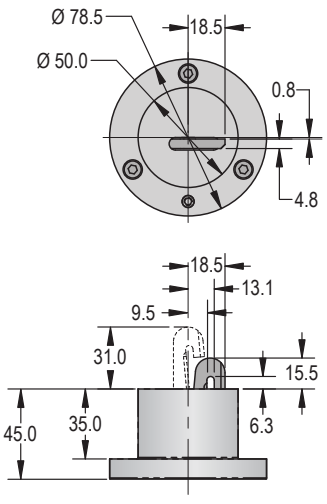
Example of a special "donut"

SFC63 HOOK CLAMP

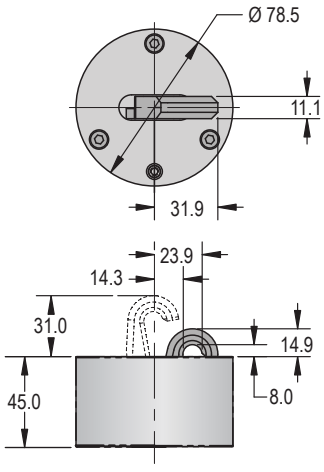




HOLE/SLOT RANGE



29-18 HOLE/SLOT RANGE



40-30 HOLE/SLOT RANGE

RLPC *ROD LOCKING* PIN CLAMP

RLPC clamps may be ordered with a rod locking feature, allowing the clamp to retain a part when air pressure is removed/lost. However, clamping force will not maintained. If you need to maintain clamping force after air pressure is removed/lost, please see our LPLC or LSFC.

	RLPC45	RLPC63
Hole/Slot Size	12.5mm - 18mm	18mm - 40mm
Clamping Force	578N @ 5.5BAR [130lbf @ 80PSI]	1334N @ 5.5BAR [300lbf @ 80PSI]
Finger Travel	15mm [0.590in] Total. Consists of: • 5mm [0.197in] rotational • 10mm [0.394in] straight line pull down stroke	
Bore Diameter	45mm [1.77in]	63mm [2.50in]
Cylinder Stroke	15mm [0.59in]	

360° Mounting
(2) locations

p.22 for Blade Mount

HOW TO ORDER

Email info@btm-europe.de to request a quote!

CLAMP SELECTION			PIN SELECTION			SENSING	ROD LOCK	SPECIAL ASSEMBLY NUMBER
RLPC	63	G	40.00	SH	F1	BDC	RL	XXXXXXX
CLAMP SERIES	CLAMP SIZE	PORT OPTION	PIN DIAMETER	HOLE TYPE	FINGER POSITION			

CLAMP SIZE
- 45
- 63

PORT OPTION
- N = 3/8 NPT
- G = G1/4

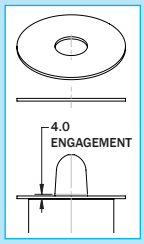
PIN DIAMETER

Clamp Size	Diameter	Clamp Weight	Flange Hole Option?
45	12.80	3.2kg [7.04lbs]	No
	13.00	3.2kg [7.05lbs]	No
	14.00	3.2kg [7.06lbs]	No
	15.80	3.2kg [7.08lbs]	No
	16.00	3.2kg [7.08lbs]	No
63	19.80	3.4kg [7.50lbs]	No
	20.00	3.4kg [7.51lbs]	No
	24.80	3.5kg [7.61lbs]	Yes
	25.00	3.5kg [7.62lbs]	Yes
	29.80	4.0kg [8.74lbs]	Yes
	30.00	4.0kg [8.75lbs]	Yes
	34.80	4.0kg [8.87lbs]	No
	35.00	4.0kg [8.88lbs]	No
	39.80	4.1kg [9.03lbs]	Yes
	40.00	4.1kg [9.04lbs]	Yes

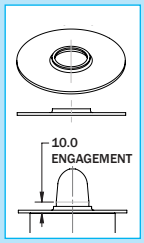
See p. 13

HOLE TYPE

SH = Standard



FL = Flanged



FL *only* available on 30-23, and 40-38mm sizes

FINGER POSITION
- F1
- F2

If no finger position is specified, F1 will be default.

SENSING

NS (No Switch)

BDC (Turck DC) *[Optional]*

See p. 23

ROD LOCK

NL (No Rod Lock)

RL (Rod Lock)

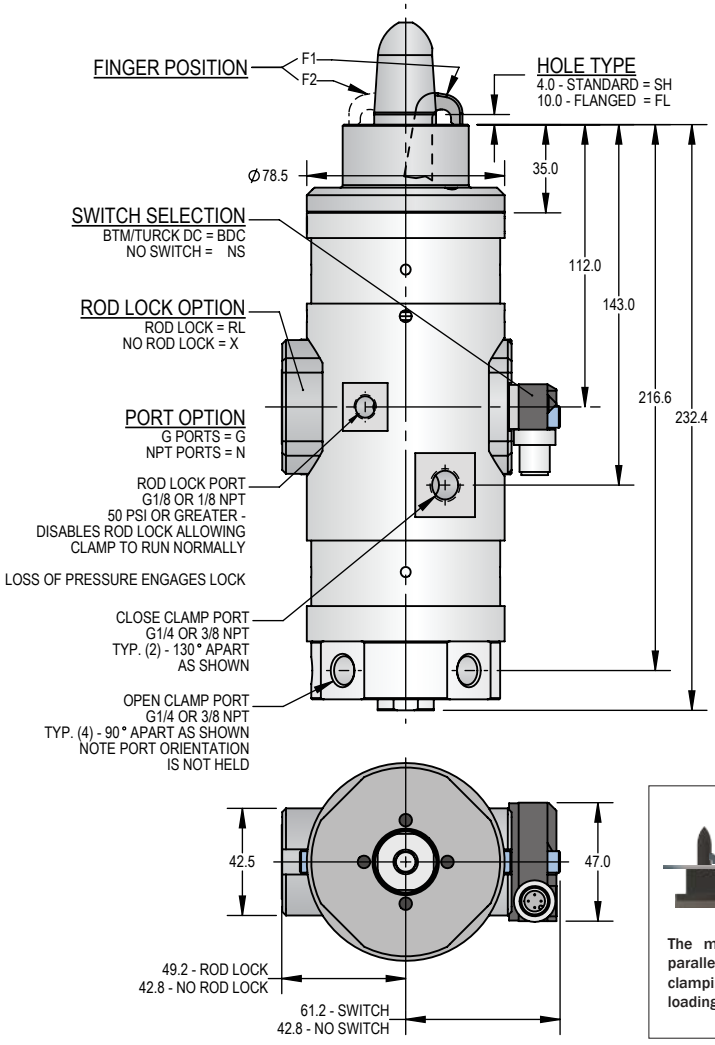
We Do Specials!

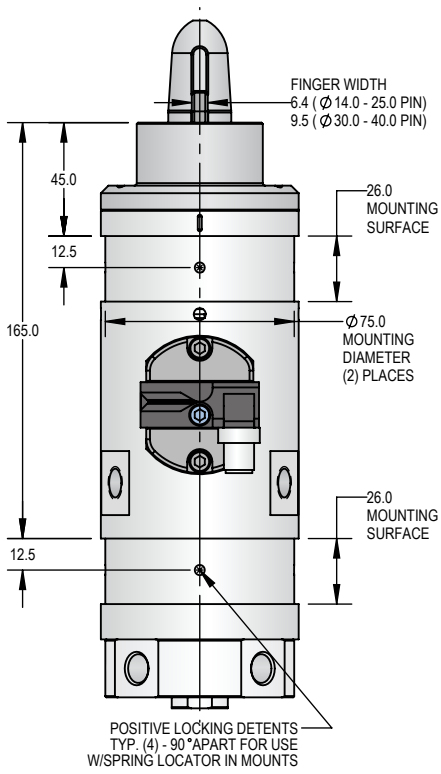
BTM Pin Clamps can be ordered with custom designed (non-standard) pins, donuts, and/or fingers. In such cases, a **SPECIAL ASSEMBLY** number will be issued by BTM's Product Engineering Department. This number must be referenced when ordering a non-standard pin clamp.

Example of a special "donut"

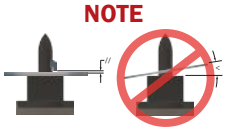
Additional pin diameters are available, but are not standard. Contact BTM for more information.

RLPC *ROD LOCKING* PIN CLAMP





NOTE



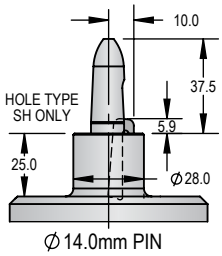
The material must be kept parallel with the rest block's clamping surface when loading over the pin.

Note: If the RLPC45 clamp is used on a flanged hole, the finger will clamp on top of the flange.

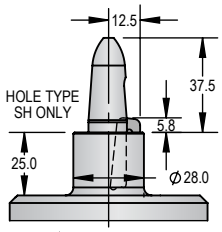
Note: If the RLPC63 clamp is used on a flanged hole, the finger will clamp over of the flange. (25mm, 30mm, and 40mm only)

PIN DIAMETERS

RLPC45 PINS

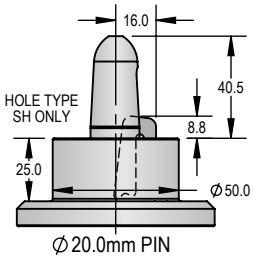


Ø14.0mm PIN

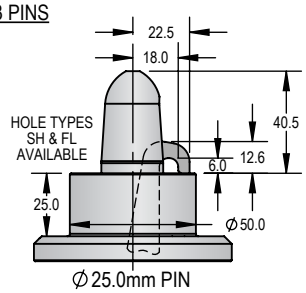


Ø16.0mm PIN

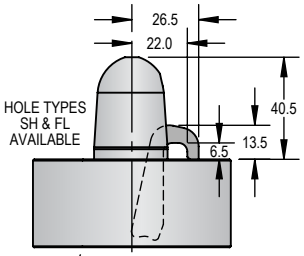
RLPC63 PINS



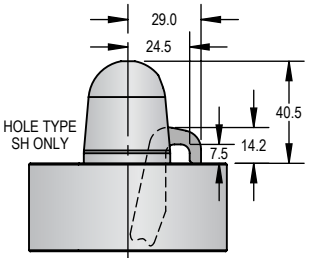
Ø20.0mm PIN



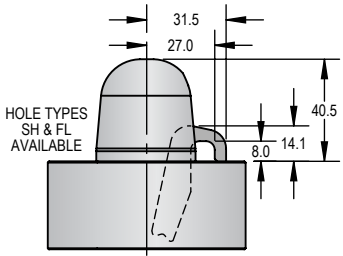
Ø25.0mm PIN



Ø30.0mm PIN



Ø35.0mm PIN

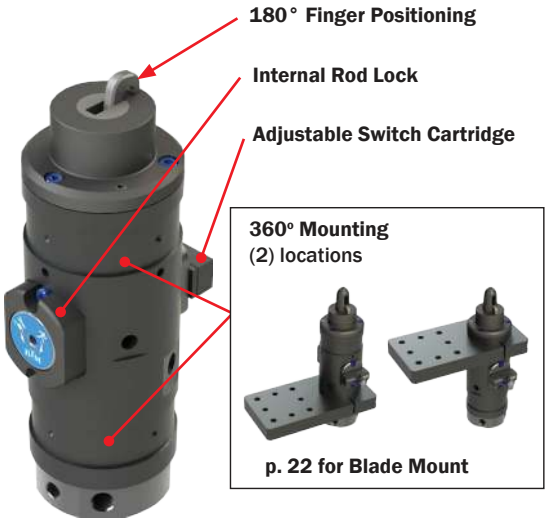


Ø40.0mm PIN

RLSFC63 *ROD LOCKING* HOOK CLAMP

RLSFC clamps may be ordered with a rod locking feature, allowing the clamp to retain a part when air pressure is removed/lost. However, clamping force will not maintained. If you need to maintain clamping force after air pressure is removed/lost, please see our LPLC or LSFC.

Hole/Slot Size	18mm - 40mm
Clamping Force	1334N @ 5.5BAR [300lbf @ 80PSI]
Finger Travel	15mm [0.590in] Total. Consists of: • 5mm [0.197in] rotational • 10mm [0.394in] straight line pull down stroke
Bore Diameter	63mm [2.50in]
Cylinder Stroke	15mm [0.59in]



HOW TO ORDER

Email info@btm-europe.de to request a quote!

CLAMP SELECTION			MODEL SELECTION		SENSING	ROD LOCK	SPECIAL ASSEMBLY #
RLSFC	63	G	25	F1	BDC	RL	XXXXXXX

CLAMP SERIES

RLSFC

CLAMP SIZE

63

PORT OPTION

N = 3/8 NPT

G = G1/4

MODEL

	Hole Diameter	Clamp Weight
25	30-23	3.4kg [7.42lbs]
40	40-36	3.8kg [8.46lbs]

See p. 15

Other Sizes can be accomodated with specials. Contact BTM for more information.

FINGER POSITION

F1

F2

If no finger position is specified, F1 will be default.

SENSING

NS (No Switch)

BDC (Turck DC) *[Optional]*

See p. 23

ROD LOCK

NL (No Rod Lock)

RL (Rod Lock)

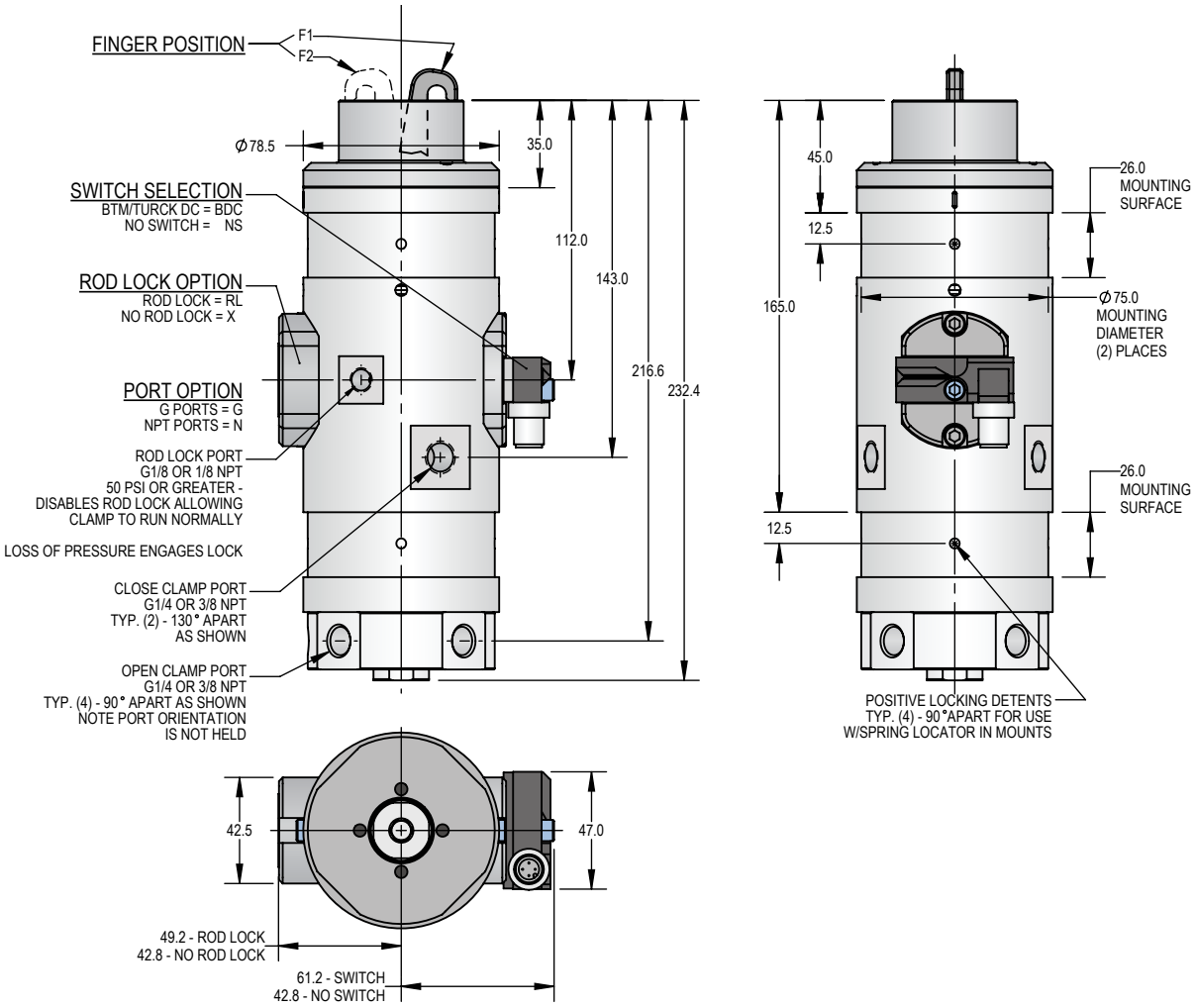
SPECIAL ASSEMBLY #

WE DO SPECIALS!

BTM Pin Clamps can be ordered with custom designed (non-standard) pins, donuts, and/or fingers. In such cases, a **SPECIAL ASSEMBLY** number will be issued by BTM's Product Engineering Department. This number must be referenced when ordering a non-standard pin clamp.

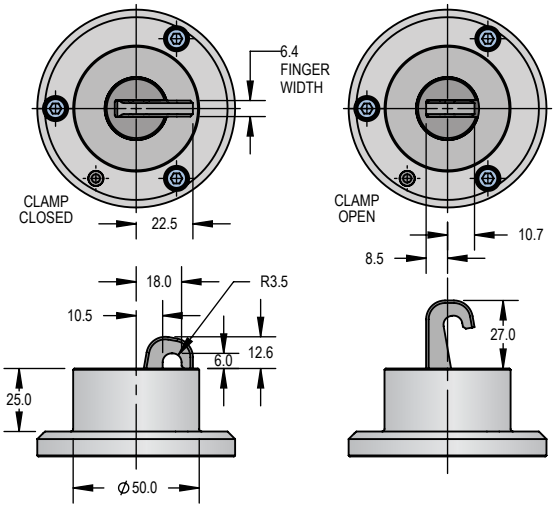
Example of a special "donut"

RLSFC63 *ROD LOCKING* HOOK CLAMP



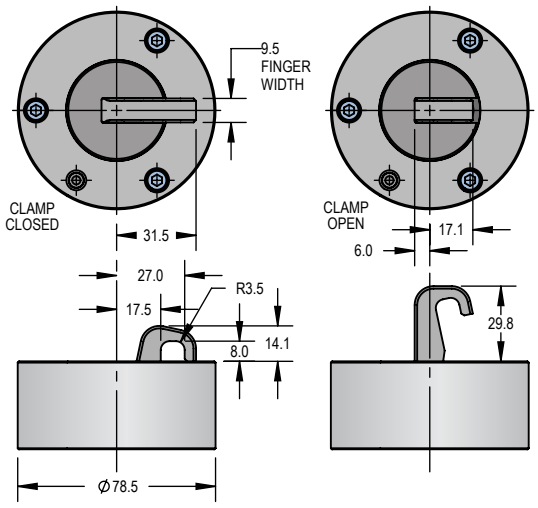
HOLE/SLOT RANGE

MODEL 25



30-23 HOLE/SLOT RANGE

MODEL 40

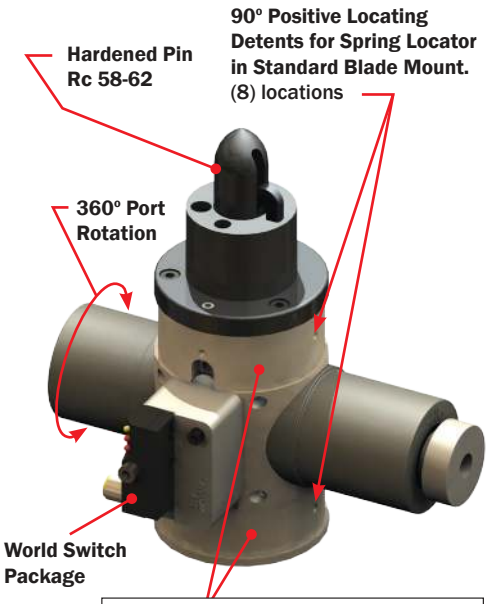


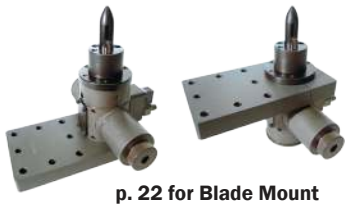
40-36 HOLE/SLOT RANGE

LPLC38 *LOCKING* PIN CLAMP

A locking pin locator clamp designed to stay locked *and* maintain clamping force even if air pressure is removed/lost.

Hole/Slot Size	18mm - 40mm
Clamping Force	890N - 1334N @ 5.5BAR [200 - 300lbf @ 80PSI]
Finger Travel	15mm [0.590in] Total. Consists of: • 5mm [0.197in] rotational • 10mm [0.394in] straight line pull down stroke • 3mm [0.118in] locking range (from clamping surface)
Bore Diameter	38mm [1.50in]
Cylinder Stroke	38.5mm [1.52in]





p. 22 for Blade Mount

HOW TO ORDER

Email info@btm-europe.de to request a quote!

CLAMP SELECTION		PIN SELECTION				SENSING		SPECIAL ASSEMBLY NUMBER
LPLC38	- N	- 20.00	- PT	- SH	- BL	- PDC	- 1	- XXXXXXX

CLAMP SERIES

LPLC38

PORT OPTION

N = 1/8 NPT

G = G1/8

PIN DIAMETER

Diameter	Clamp Weight	Flange Hole Option?
19.80	3.54kg [7.81lbs]	No
20.00	3.54kg [7.81lbs]	No
24.80	3.59kg [7.91lbs]	Yes
25.00	3.59kg [7.91lbs]	Yes
29.80	4.33kg [9.54lbs]	Yes
30.00	4.33kg [9.54lbs]	Yes
34.80	4.40kg [9.69lbs]	No
35.00	4.40kg [9.69lbs]	No
39.80	4.46kg [9.83lbs]	Yes
40.00	4.46kg [9.83lbs]	Yes

See p.17 for Dimension Information

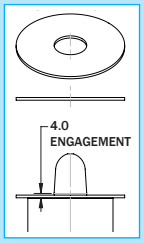
Additional pin diameters are available, but are not standard. Contact BTM for more information.

PIN STYLE

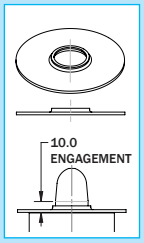
PT = Tapered Pin

HOLE TYPE

SH = Standard



FL = Flanged



FL *only* available on 25-24.8, 30-29.8, and 40-39.8mm sizes

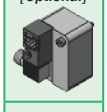
PIN COATING

BL = Black Oxide

SWITCH OPTION

NS (No Switch)

PDC (Pepperl + Fuchs® DC) *[Optional]*



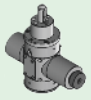
TDC (Turck DC) *[Optional]*

See p. 23

Other switch brands are available. Contact BTM for details.

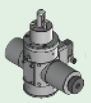
SWITCH POSITION

NS (No Switch)



1 (Front)

2 (Back)

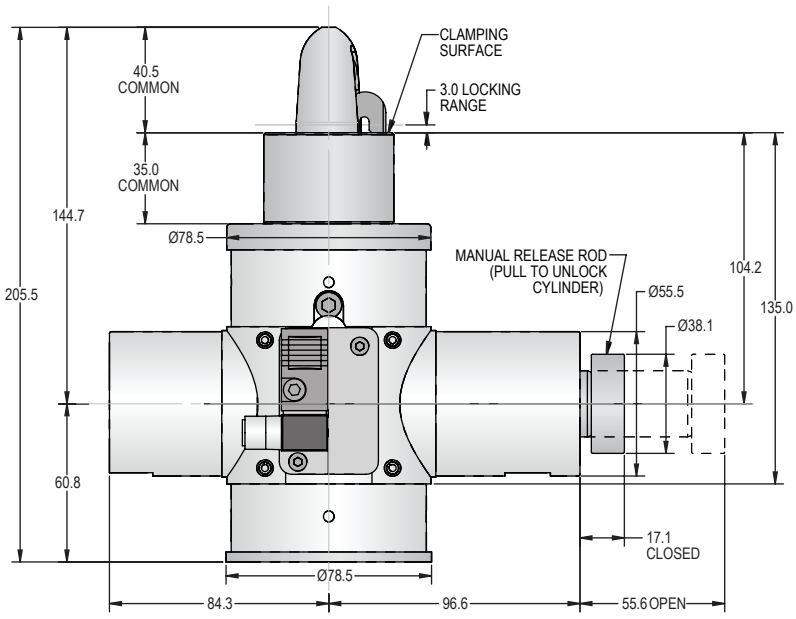


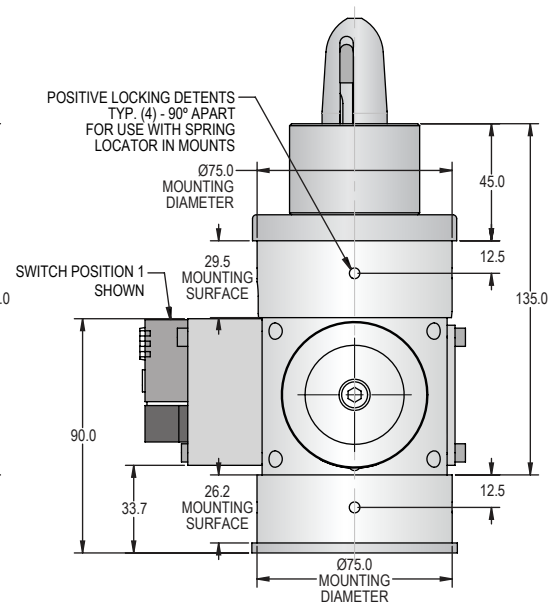
WE DO SPECIALS!

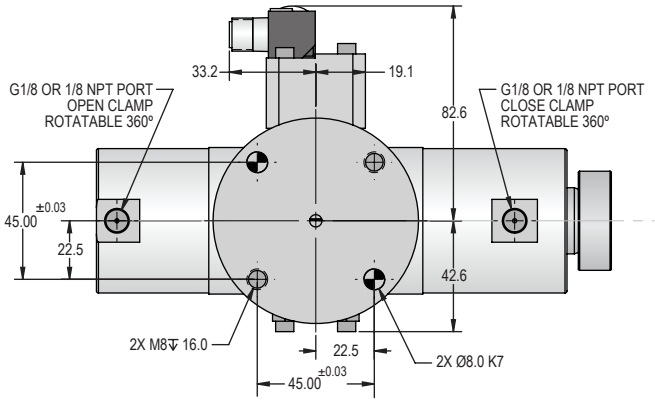
BTM Pin Clamps can be ordered with custom designed (non-standard) pins, donuts, and/or fingers. In such cases, a **SPECIAL ASSEMBLY** number will be issued by BTM's Product Engineering Department. This number must be referenced when ordering a non-standard pin clamp.

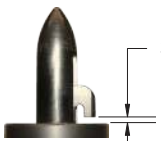
Example of a special "donut"

LPLC38 *LOCKING* PIN CLAMP





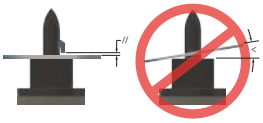




The locking feature of the LPLC38 clamp engages in the last **3mm** of the finger stroke.

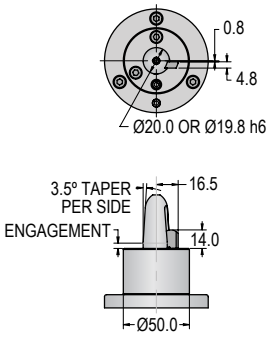
Note: If the LPLC38 clamp is used on a flanged hole, the finger will clamp over of the flange. (25mm, 30mm, and 40mm only)

NOTE



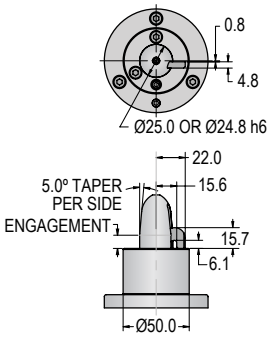
The material must be kept parallel with the rest block's clamping surface when loading over the pin.

PIN DIAMETERS



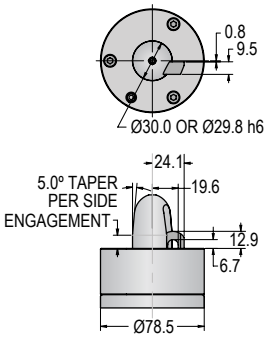
Ø20.0 AND Ø19.8 PINS

HOLE TYPE: SH ONLY



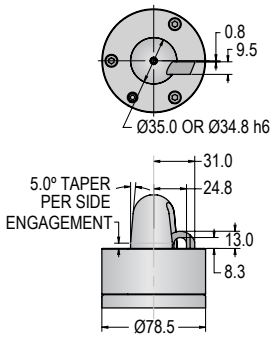
Ø25.0 AND Ø24.8 PINS

FL/SH AVAILABLE



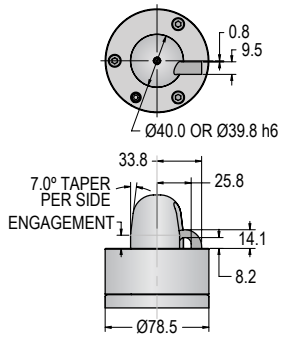
Ø30.0 AND Ø29.8 PINS

FL/SH AVAILABLE



Ø35.0 AND Ø34.8 PINS

SH ONLY



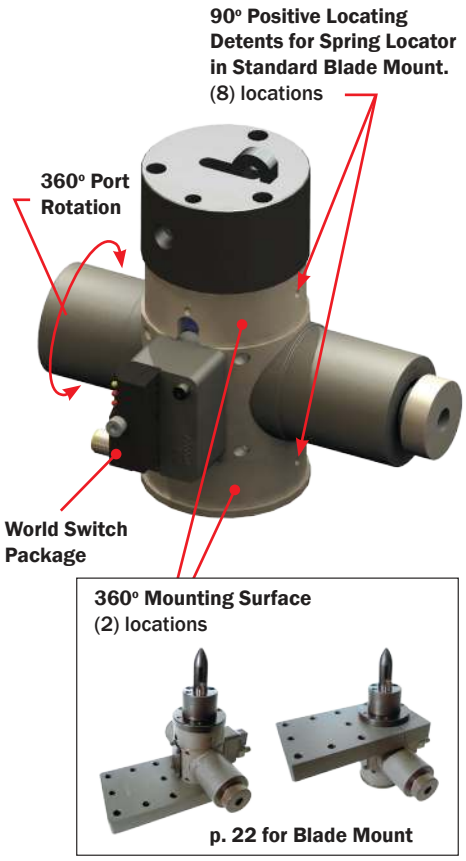
Ø40.0 AND Ø39.8 PINS

FL/SH AVAILABLE

LSFC38 *LOCKING* HOOK CLAMP

A locking single finger clamp designed to stay locked *and* maintain clamping force even if air pressure is removed/lost.

Hole/Slot Size	18mm - 40mm
Clamping Force	890N - 1334N @ 5.5BAR [200 - 300lbf @ 80PSI]
Finger Travel	15mm [0.590in] Total. Consists of: • 5mm [0.197in] rotational • 10mm [0.394in] straight line pull down stroke • 3mm [0.118in] locking range (from clamping surface)
Bore Diameter	38mm [1.50in]
Cylinder Stroke	38.5mm [1.52in]



HOW TO ORDER

Email info@btm-europe.de to request a quote!

CLAMP SELECTION		HOLE/SLOT RANGE	SENSING		SPECIAL ASSEMBLY NUMBER
LSFC38	- N	- 40-30	- PDC	- 1	- XXXXXXX

CLAMP SERIES

PORT OPTION

N = 1/8 NPT
G = G1/8

Diameter	Clamp Weight
29-18	3.29kg [7.25lbs]
40-30	3.96kg [8.72lbs]

See p.19 for Dimension Information

SWITCH OPTION

NS (No Switch)

PDC (Pepperl + Fuchs® DC) *[Optional]*

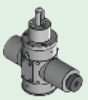
TDC (Turck DC) *[Optional]*

See p. 23

Other switch brands are available. Contact BTM for details.

SWITCH POSITION

NS (No Switch)



1 (Front)

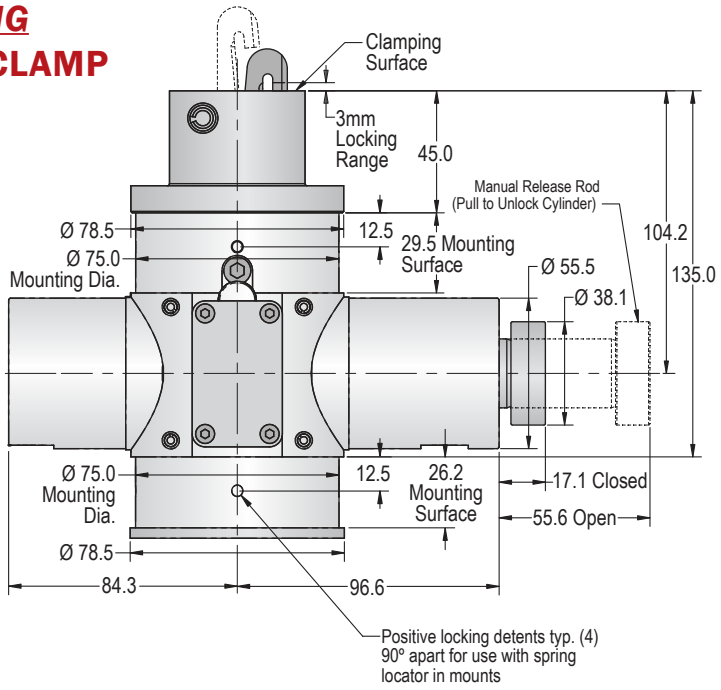
2 (Back)

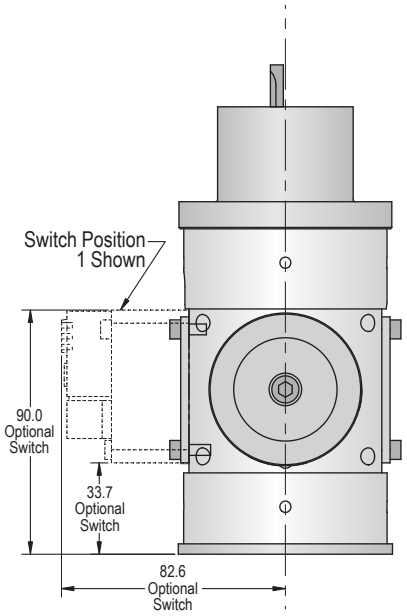
WE DO SPECIALS!

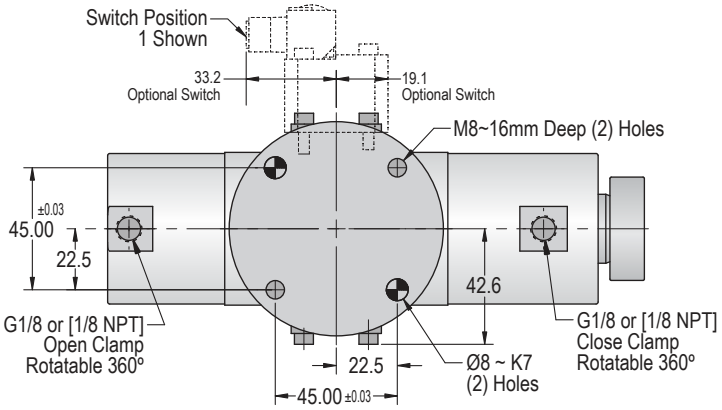
BTM Single Finger (Hook) Clamps can be ordered with custom designed (non-standard) donuts, and/or fingers. In such cases, a **SPECIAL ASSEMBLY** number will be issued by BTM's Product Engineering Department. This number must be referenced when ordering a non-standard single finger (hook) clamp.

Example of a special "donut"

LSFC38 *LOCKING* HOOK CLAMP

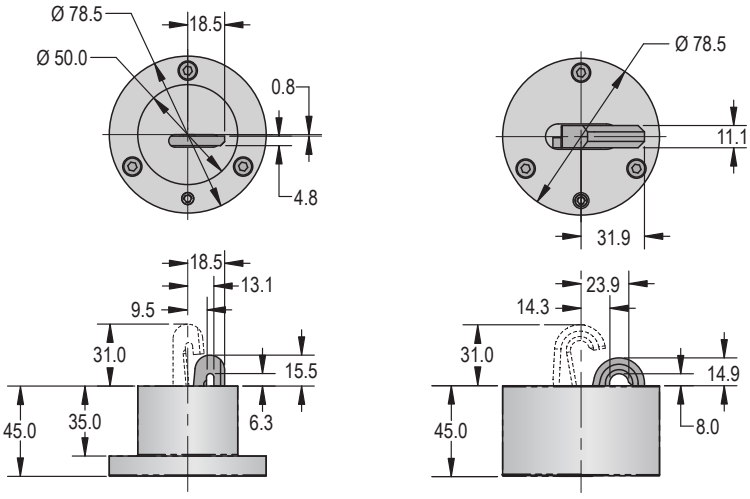






The locking feature of the LSFC38 clamp engages in the last 3mm of the finger stroke.

HOLE/SLOT RANGE

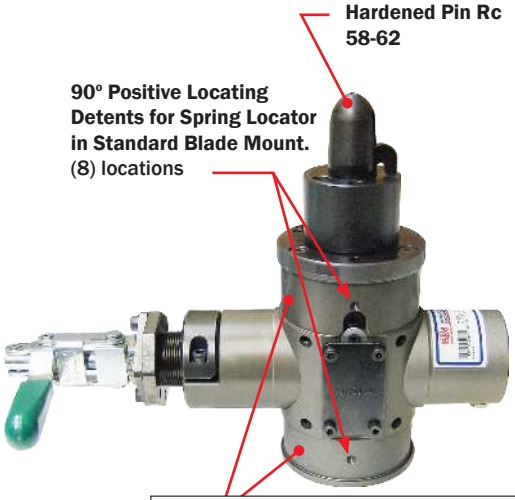


29-18 HOLE RANGE **40-30 HOLE RANGE**

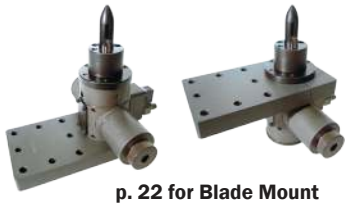
LPLC38M *LOCKING* MANUAL PIN CLAMP

A locking, manually operated pin locator clamp designed to maintain clamping force in the closed (locked) position.

Hole/Slot Size	18mm - 40mm
Clamping Force	1112N [250lbf]
Finger Travel	15mm [0.590in] Total. Consists of: • 5mm [0.197in] rotational • 10mm [0.394in] straight line pull down stroke • 3mm [0.118in] locking range (from clamping surface)



360° Mounting Surface
(2) locations



p. 22 for Blade Mount

HOW TO ORDER

Email **info@btm-europe.de** to request a quote!

CLAMP SELECTION	HANDLE LOCATION	PIN SELECTION			SPECIAL ASSEMBLY #
LPLC38M	- L	- 25.00	- PT	- SH - BL	- XXXXXX

CLAMP SERIES

HANDLE LOCATION
- **L** = Left Side of Clamp
- **R** = Right Side of Clamp

PIN DIAMETER

Diameter	Clamp Weight	Flange Hole Option?
24.80	3.59kg [7.91lbs]	Yes
25.00	3.59kg [7.91lbs]	Yes
34.80	4.40kg [9.69lbs]	No
35.00	4.40kg [9.69lbs]	No
39.80	4.46kg [9.83lbs]	Yes
40.00	4.46kg [9.83lbs]	Yes

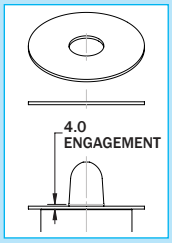
See p.21

Additional pin diameters are available, but are not standard. Contact BTM for more information.

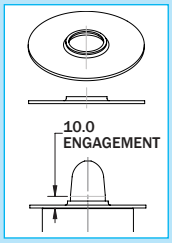
PIN STYLE
- **PT** = Tapered Pin

HOLE TYPE

SH = Standard



FL = Flanged



FL *only* available on 25-24.8, 30-29.8, and 40-39.8mm sizes

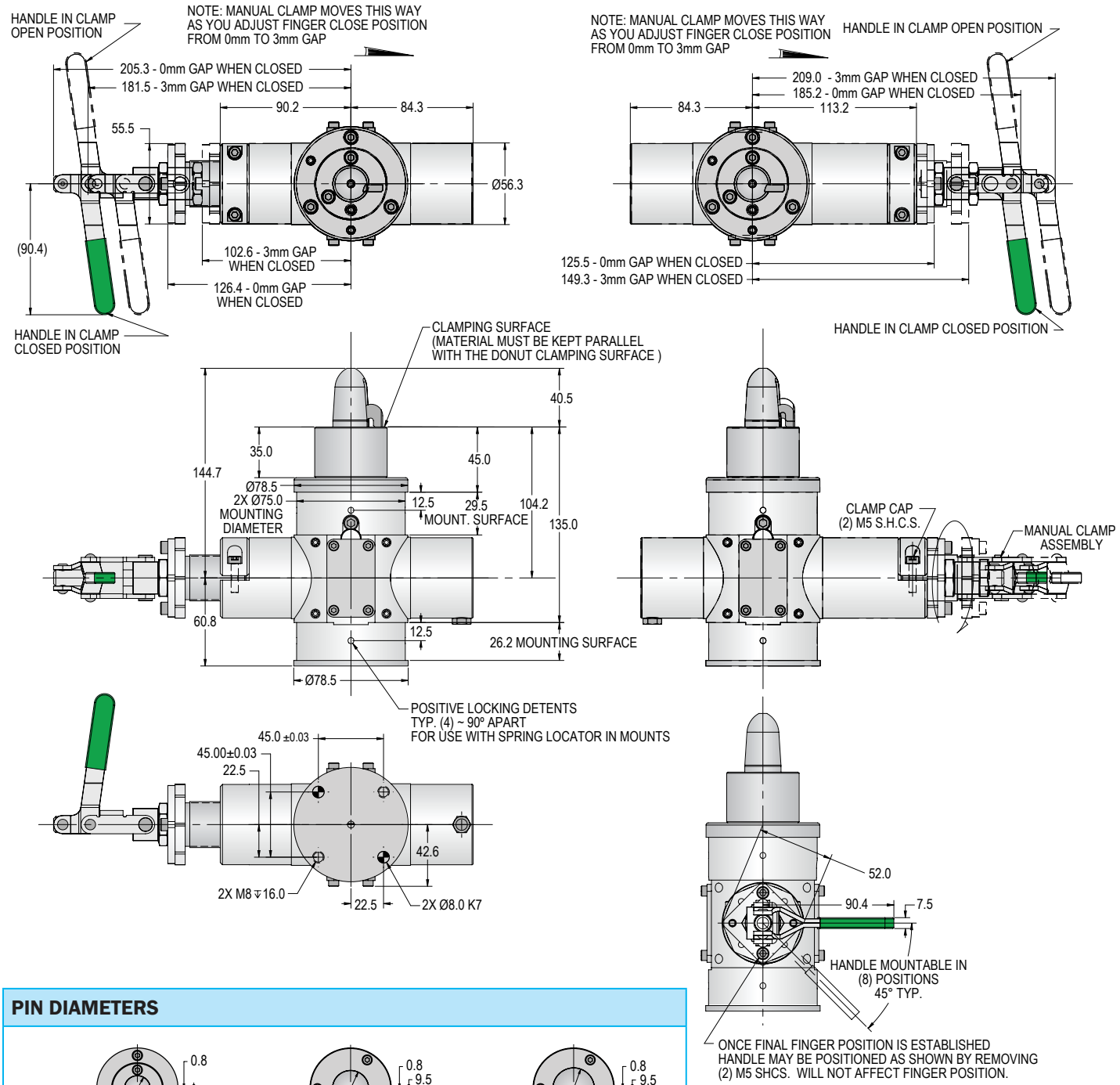
PIN COATING
- **BL** = Black Oxide

WE DO SPECIALS!

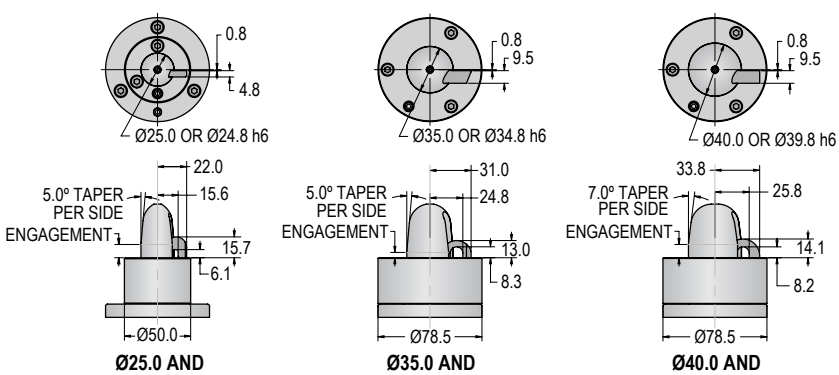
BTM Pin Clamps can be ordered with custom designed (non-standard) pins, donuts, and/or fingers. In such cases, a **SPECIAL ASSEMBLY** number will be issued by BTM's Product Engineering Department. This number must be referenced when ordering a non-standard pin clamp.

Example of a special "donut"

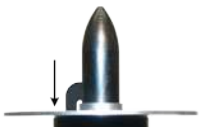
LPLC38M *LOCKING* MANUAL PIN CLAMP



PIN DIAMETERS

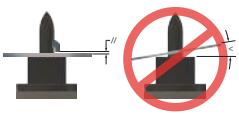


Ø25.0 AND Ø24.8 PINS	Ø35.0 AND Ø34.8 PINS	Ø40.0 AND Ø39.8 PINS
HOLE TYPE: FL/SH AVAILABLE	SH ONLY	FL/SH AVAILABLE



Note: If the LPLC38M clamp is used on a flanged hole, the finger will clamp over of the flange. (25mm, 30mm, and 40mm only)

NOTE

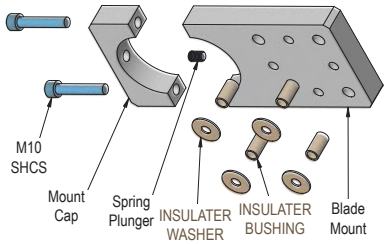


The material must be kept parallel with the rest block's clamping surface when loading over the pin.

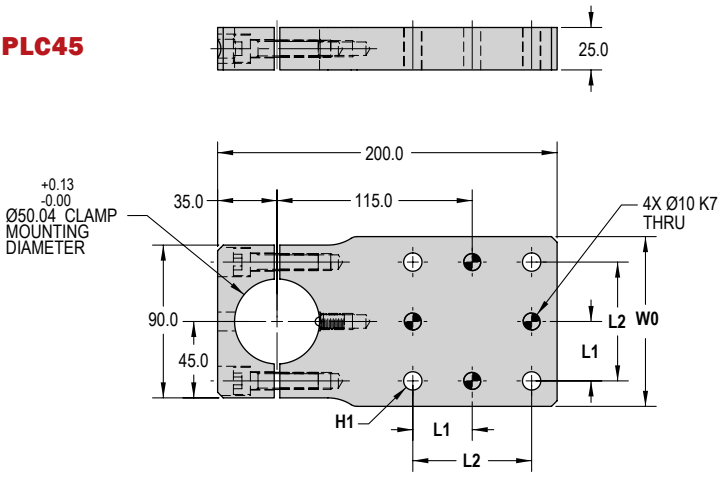
BLADE MOUNT INFORMATION

Blade style clamp mounts are currently offered in four different configurations: Insulated or non-insulated for C-flex mounting, and insulated or non-insulated for NAAMS mounting. The insulated mounts are used in welding applications, and come with insulating washers and bushings in the screw holes.

NOTE: It is the customer's responsibility to insulate any dowels required for mounting.

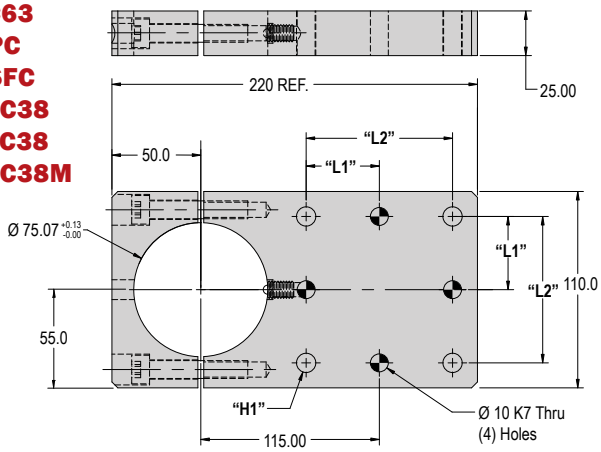


PLC45



Mount Type	Ø H1 Thru (4) Holes	W0	L0	L1	L2	BTM Number
Insulated C-Flex Mount	12.0 Insulater Bushing	110.0	205.0	41.00	82.00	794400A
C-Flex Mount	12.1	110.0	205.0	41.00	82.00	794400B
Insulated NAAMS Mount	10.0 Insulater Bushing	100.0	200.0	35.00	70.00	794400C
NAAMS Mount	10.8	100.0	200.0	35.00	70.00	794400D

PLC63
SFC63
RLPC
RLSFC
LPLC38
LSFC38
LPLC38M



Mount Type	Ø H1 Thru (4) Holes	L1	L2	BTM Part Number
Insulated C-Flex Mount	12.0 Insulator Bushing	41.00	82.00	794100A
C-Flex Mount	12.1	41.00	82.00	794100B
Insulated NAAMS Mount	10.0 Insulator Bushing	35.00	70.00	794100C
NAAMS Mount	10.8	35.00	70.00	794100D

MOUNT PLACEMENT

PLC45, PLC63, SFC63, RLPC, RLSFC, LPLC38, and LSFC38 models have two mounting surfaces from which to apply the blade mount (upper & lower). This allows the user flexibility in choosing the placement of the clamping surface relative to the mounting surface.

PLC, RLPC, SFC & RLSFC Clamps

Lower

Upper

LPLC & LSFC Clamps

CLAMP ROTATION

Spring locator for positive locating of mounting reference detents.

Detents are located 4 places 90° apart on round body pin clamps. Detents provided for convenience, but do not need to be used.

3-WAY SHIM MOUNT AVAILABLE

Contact BTM for more information.

Shims X, Y, Z
± 2.5mm

SWITCH INFORMATION

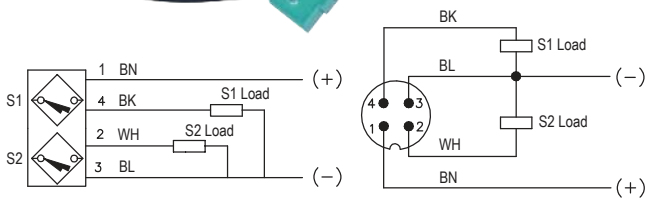
STANDARD SWITCHES
FOR PLC45, PLC63, SFC63, LPLC38, & LSFC38

PDC - PEPPERL+FUCHS DC

NBN2-F581-160S6-E8-V1

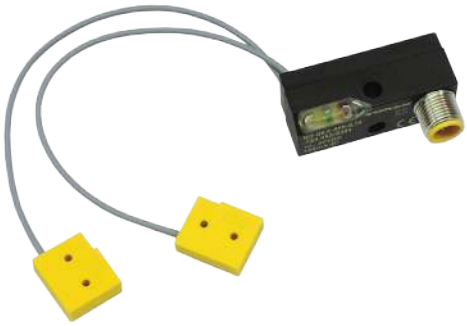
LED INDICATORS

GREEN - POWER ON
YELLOW - S1 OUTPUT ENERGIZERED
RED - S2 OUTPUT ENERGIZED



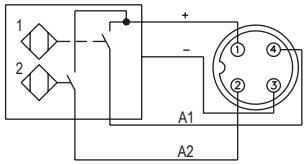
TDC - TURCK DC

Ni2Q6.5AP6-0.16-FS4.4X3/S304



LED INDICATORS

YELLOW - SO1 OUTPUT ENERGIZED
GREEN - POWER ON
RED - SO2 OUTPUT ENERGIZED



Other switches are also available (including Turck AC), but are not stocked by BTM.

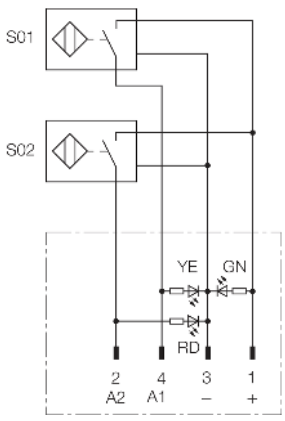
STANDARD SWITCHES
FOR RLPC45, RLPC63, RLSFC63

BDC - TURCK DC

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

LED INDICATORS

YELLOW - SO1 OUTPUT ENERGIZED
GREEN - POWER ON
RED - SO2 OUTPUT ENERGIZED



BTM® EUROPE

WARRANTY INFORMATION

BTM Company, LLC. warranties its Pin and Hook Clamps against defects in material and workmanship for one (1) million cycles or a period of three (3) years after the ship date from BTM, which ever 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.

BTM ALSO OFFERS XPC PIN LOCATOR CLAMPS

XPC Clamps are Locking Pin Locator Clamps designed with multiple extension lengths to protrude up into hard to reach locator holes while keeping the bulk of the drive cylinder away from the work area.

Model	Hole/Slot Range	Locking?	Manual Option Available?
XPC	24.8-40mm	Yes	Yes

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

WWW.BTM-EUROPE.DE