# PG-45 Grippers





# STANDARD PADS



CUSTOM PADS AVAILABLE



# PG-45 Locking Grippers





#### **Locking Grip**

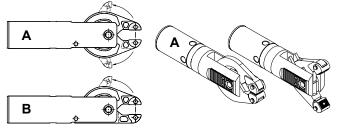
Roller finds detent on the cam surface to hold the part if air pressure is lost.

#### Adjustable Opening

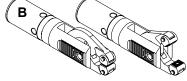
A single pin adjusts the arm opening to 30° or 45°, remove the pin for 75° opening.



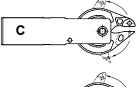
#### MODE



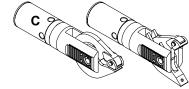
Double Opening Pad Arms 30°, 45° or 75° opening per arm **PG-45 A** pg. 20



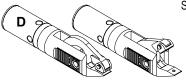
Single Opening Fixed Pad Arm 30°, 45° or 75° opening PG-45 B pg. 21



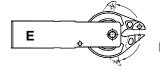
D

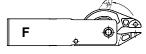


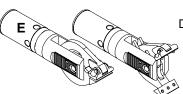
Double Opening Single Chisel Arm 30°, 45° or 75° opening per arm **PG-45 C** pg. 22



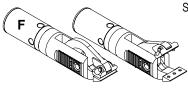
Single Opening Fixed
Single Chisel Arm
30°, 45° or 75°
opening
PG-45 D
pg. 23



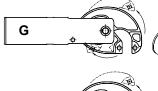


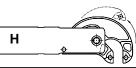


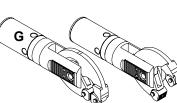
Double Opening
Double Chisel Arm
30°, 45° or 75°
opening per arm
PG-45 E
pg. 24



Single Opening Fixed
Double Chisel Arm
30°, 45° or 75°
opening
PG-45 F
pg. 25

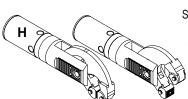




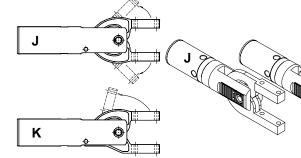


Double Opening Flange Pad Arms 30°, 45° or 75° upper arm opening 16°, 22° or 45° lower arm opening

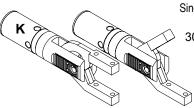
**PG-45 G** pg. 26



Single Opening Fixed Flange Pad Arms 30°, 45° or 75° opening PG-45 H pg. 27

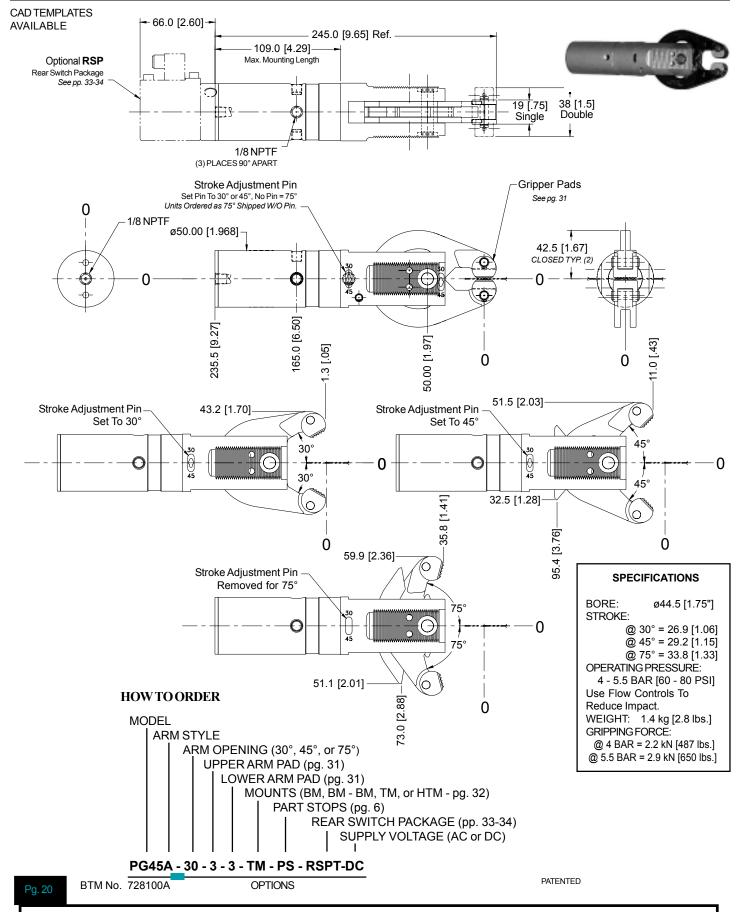


Double Opening Adaptable Arm 30° or 45° opening per arm **PG-45 J** pg. 28

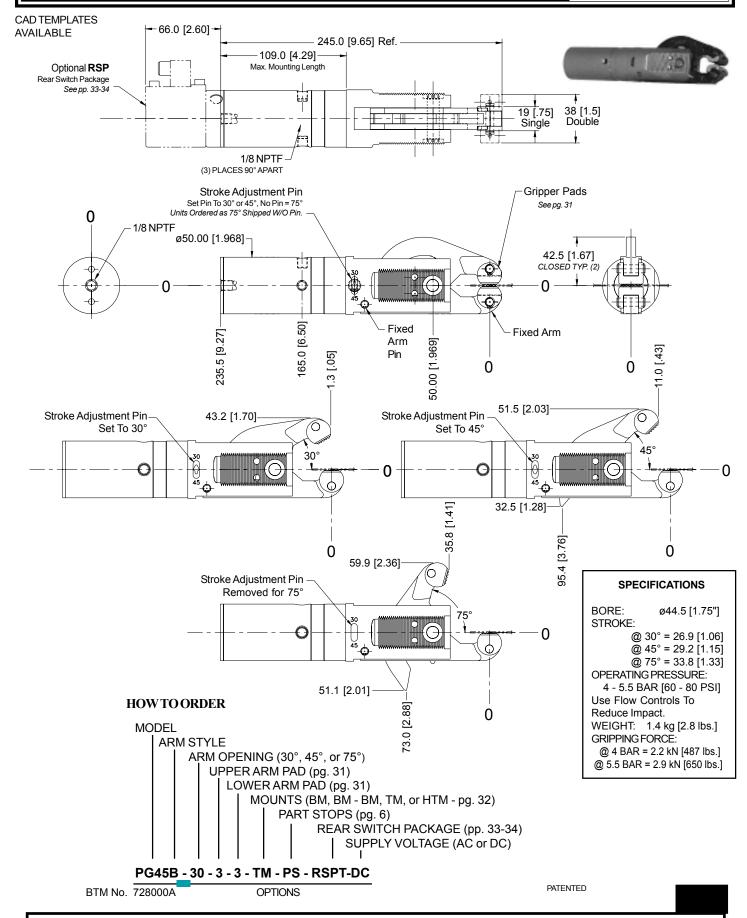


Single Opening Fixed Adaptable Arm 30°, 45° or 75° opening **PG-45 K** pg. 29



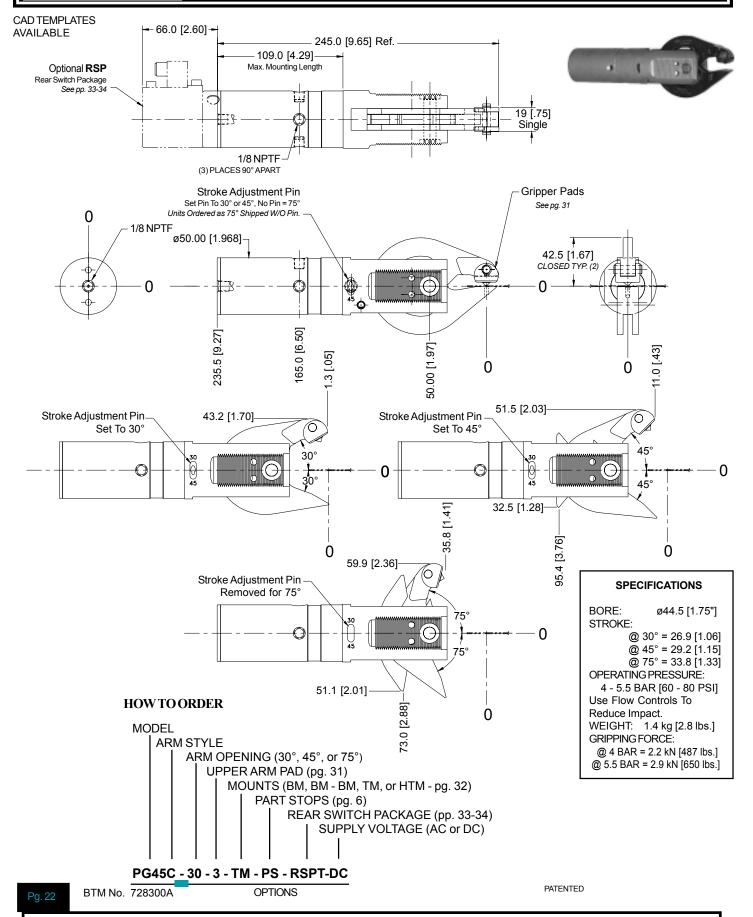






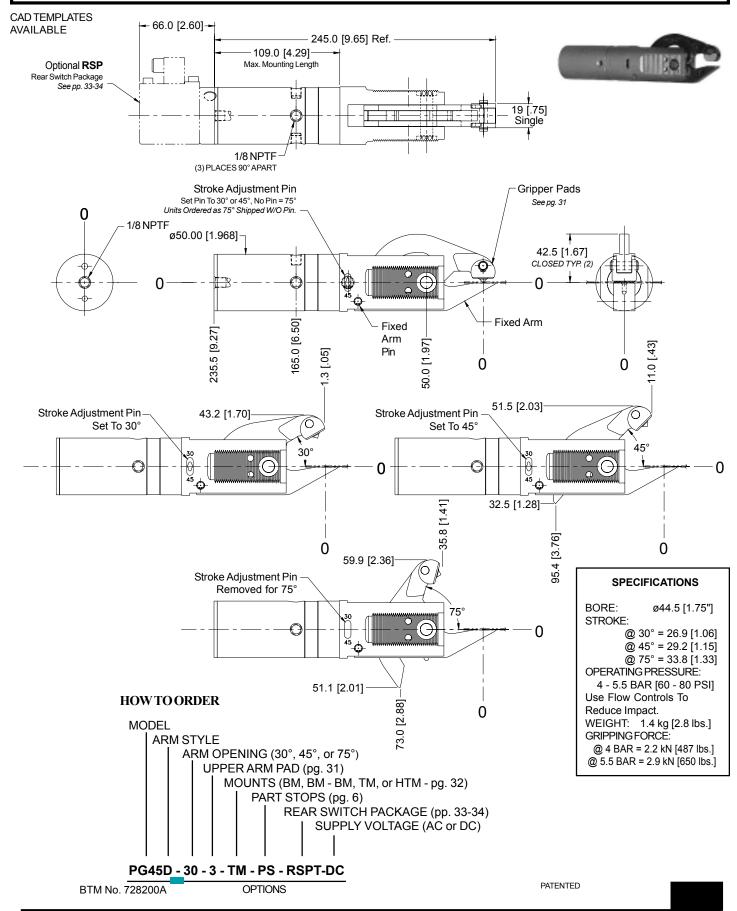


# PG-45C ~ Double Opening ~ Single Chisel Arm



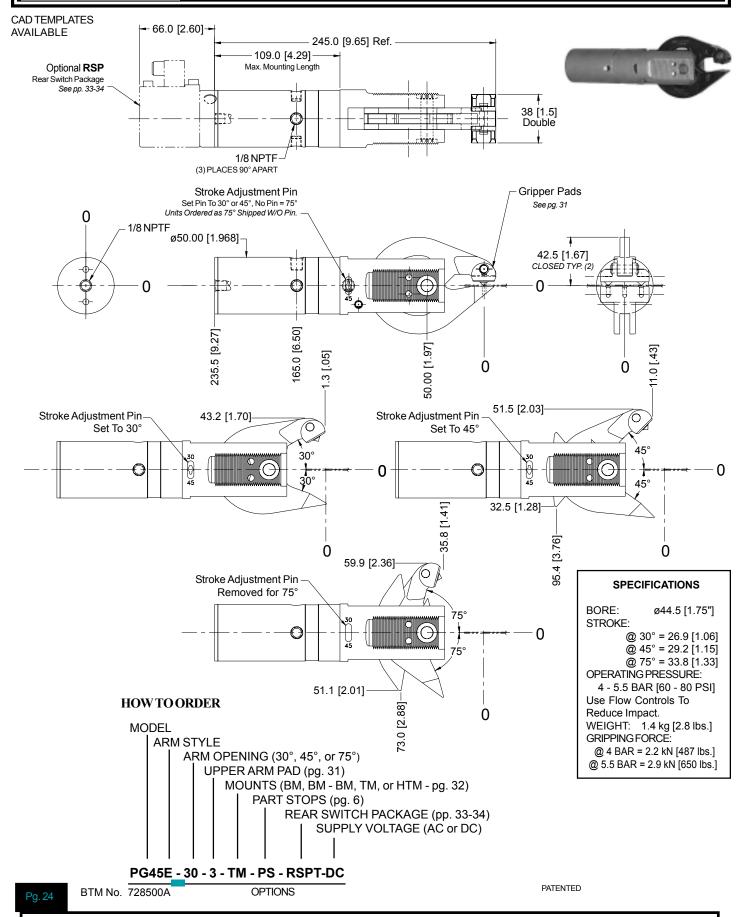
# PG-45D ~ Single Opening ~ Single Chisel Arm PG-45D BTM No. 728200A





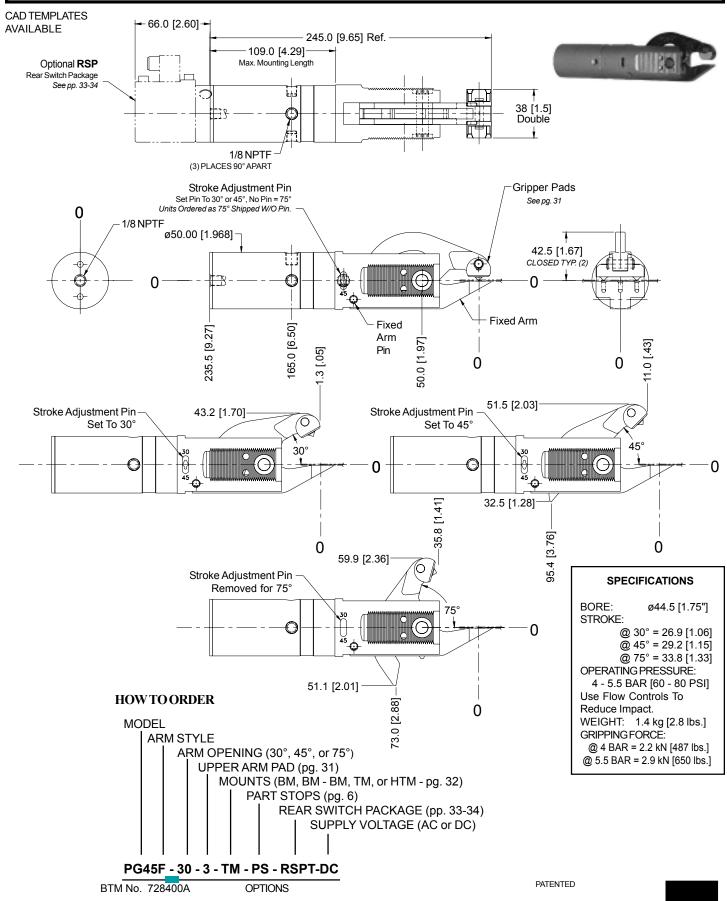


# PG-45E ~ Double Opening ~ Double Chisel Arm



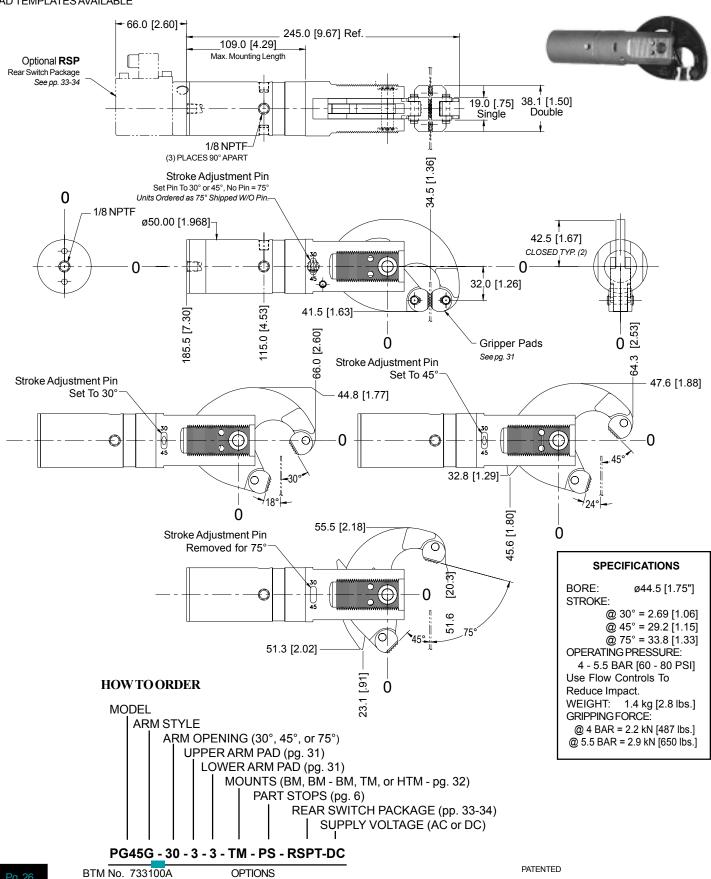
# PG-45F ~ Single Opening ~ Double Chisel Arm PG-45F BTM No. 728400A





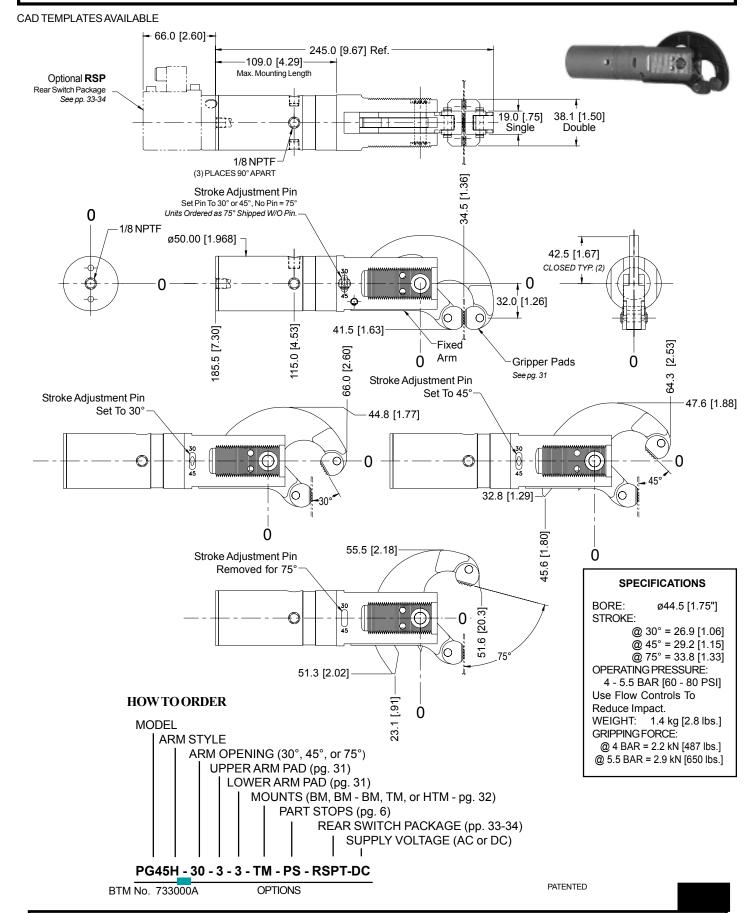


CAD TEMPLATES AVAILABLE



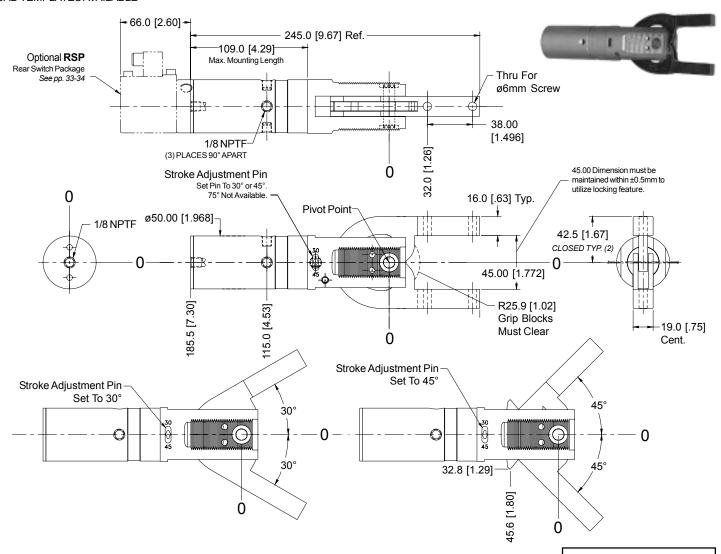
## PG-45H ~ Single Opening ~ Flange Pad Arms PG-45H BTM No. 733000A







#### CAD TEMPLATES AVAILABLE



## 75° Opening Gripper Not Available

MOUNTS (BM, BM - BM, TM, or HTM - pg. 32)

REAR SWITCH PACKAGE (pp. 33-34) SUPPLY VOLTAGE (AC or DC)

#### **SPECIFICATIONS**

BORE: ø44.5 [1.75"]

STROKE:

@ 30° = 26.9 [1.06]  $@45^{\circ} = 29.2[1.15]$ 

OPERATING PRESSURE: 4 - 5.5 BAR [60 - 80 PSI] Use Flow Controls To

Reduce Impact.

WEIGHT: 1.4 kg [2.8 lbs.]

## GRIPPING FORCE (lbs.) =

15 X Line Pressure (PSI) Length (In.) From Pivot Point To Center Of Gripping Contact

GRIPPING FORCE (N) =

25,000 X Line Pressure (Bars) Length (mm) From Pivot Point To Center Of Gripping Contact

ARM OPENING (30° or 45°)

PART STOPS (pg. 6)

PG45J - 30 - TM - PS - RSPT-DC BTM No. 735000A **OPTIONS** 

**HOW TO ORDER** 

**ARM STYLE** 

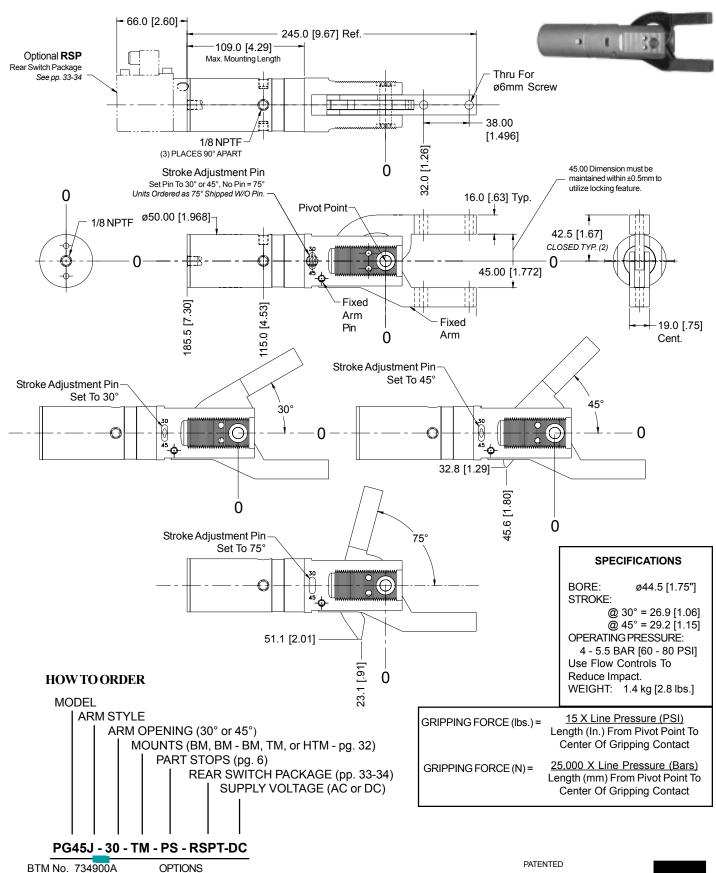
MODEL

PATENTED

## PG-45K ~ Single Opening ~ Adaptable Arms PG-45K BTM No. 734900A

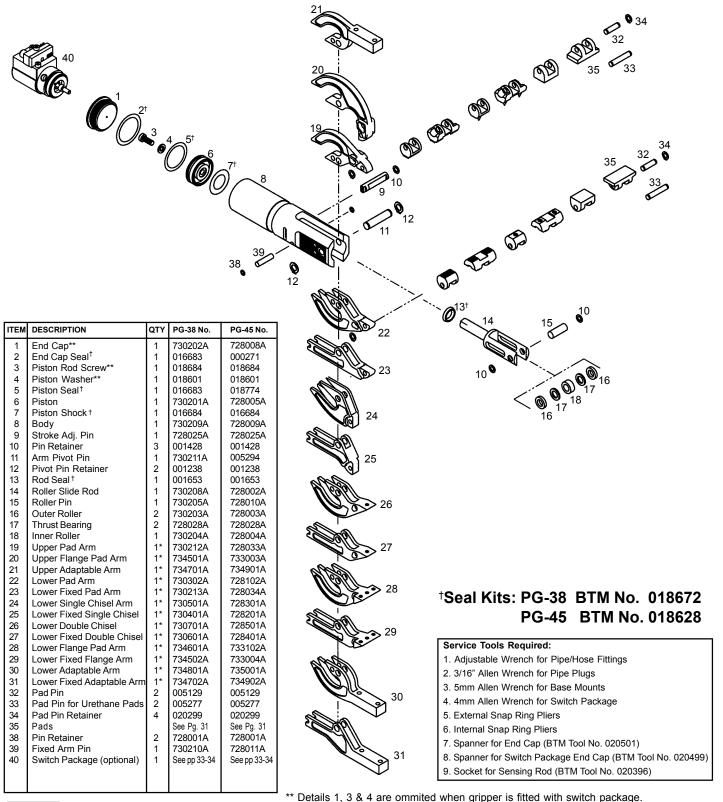


CAD TEMPLATES AVAILABLE





# PG-38 & PG-45 Components



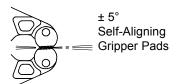
<sup>\* 4</sup> Harrar 0.4 Larrar Arrar a result

<sup>\* 1</sup> Upper & 1 Lower Arm per unit.

# PG-38 & PG-45 Accessories



#### Interchangeable Gripper Pads Fits both PG 38 & PG 45 Models



Custom pads can be manufactured to meet your specific application. Contact BTM for details.

# Double Urethane Pad Single Urethane Pad Double Point Pad Single Point Pad Double Smooth Pad Single Smooth Pad Double Steel Pad Single Steel Pad

#### **GRIPPER PADS**

#### Single Steel Pads For Material Thickness See Above 1 - No. 728039A [P] 2 - No. 728040A [W] 19 - No. 728056A [Y] Use in pairs or w/ Point Pads



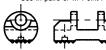






#### Double Steel Pads

For Material Thickness See Above 3 - No. 728037A [P] 4 - No. 728038A [W] 20 - No. 728055A [Y] Use in pairs or w/ Point Pads



Double Urethane Pads 10/60 - Soft ~ Yellow No. 728000M 10/90 - Hard ~ Orange No. 728000K Use in pairs



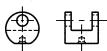
#### Single Point Pads

For Material Thickness See Above 5 - No. 728043A [P] 6 - No. 728044A [W] Use w/ Steel or Smooth Pads or Chisel



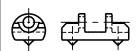
#### Single Smooth Pads

For Material Thickness See Above **11** - No. 728047A [P] 12 - No. 728048A [W] 21 - No. 728057A [Y] Use in pairs or w/ Point Pads



#### Double Point Pads

For Material Thickness See Above **7** - No. 728041A [P] 8 - No. 728042A [W] Use w/ Steel or Smooth Pads or Chisel



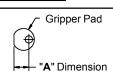
#### Double Smooth Pads

For Material Thickness See Above 13 - No. 728049A [P] 14 - No. 728050A [W] 22 - No. 728058A [Y]

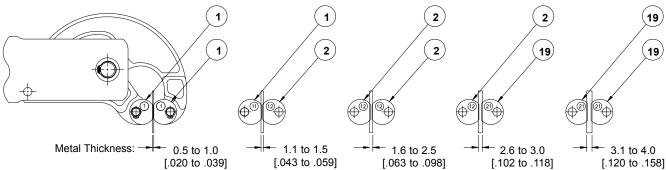


## Selection of Gripper Pad Combinations for Metal Thickness





**NOTE: URETHANE PADS** WORK FOR ALL METAL THICKNESS COMBINA-**TIONS** 

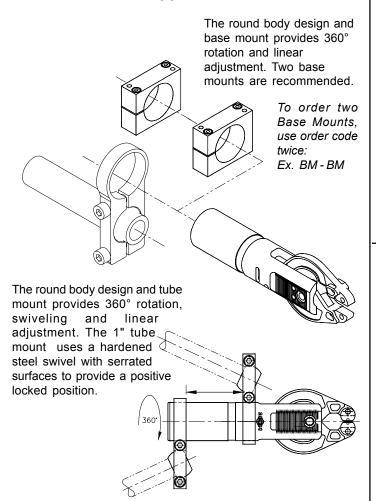


Gripper Pad Color Codina: [P]=Pink [W]=White [Y]=Yellow

Metal Thickness	Single Steel	Double Steel	Single Point	Double Point	Single Smooth	Double Smooth	Color
0.5 to 1.0 [.020 to .039]	1+1	3+3	5+11	7+13	11+11	13+13	Pink
1.1 to 1.5 [.043 to .059]	1+2	3+4	5+12	7+14	11+12	13+14	Pink+White
1.6 to 2.5 [.063 to .098]	2+2	4+4	6+12	8+14	12+12	14+14	White
2.6 to 3.0 [.102 to .118]	2+19	4+20	6+21	8+22	12+21	14+22	White+Yellow
3.1 to 4.0 [.120 to .158]	19+19	20+20			21+21	22+22	Yellow

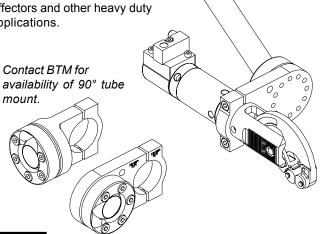
#### PG-38 & PG-45 Accessories

#### **Gripper Mounts**



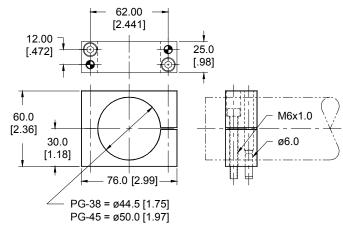
The 1 1/4" tube mount is available in 90° and in-line configuratgions. It is ideal for use with Robot End Arm Effectors and other heavy duty applications.

Pg. 32

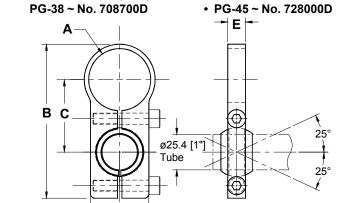


#### (BM) Base Mount

PG-38 ~ No. 730200C • PG-45 ~ No. 728000E

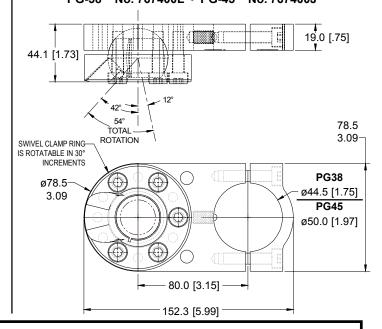


#### (TM) Tube Mount



	Α	В	С	D	E
PG-38	ø44.5 [1.75]	110.4 [4.35]	52.0 [2.05]	41.7 [1.64]	12.7 [.50]
PG-45	ø50.0 [1.97]	116.2 [4.57]	55.0 [2.17]	41.7 [1.64]	12.7 [.50]

#### (HTM) 1 1/4" Tube Mount PG-38 ~ No. 767400L • PG-45 ~ No. 767400J



# PG-38 & PG-45 Accessories

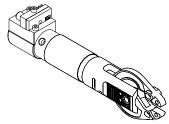
[1.85]

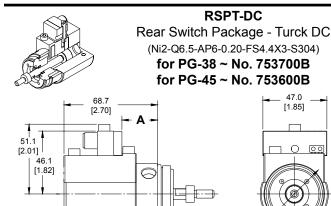


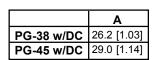
#### **Position Sensors**

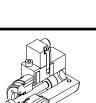
Single Connector Status Controller AC or DC Proximity Switch Senses Open & Closed Positions

ø 50.0 [1.97]





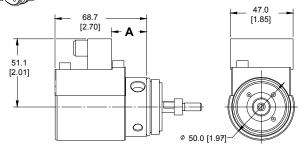




#### **RSPT-AC**

Rear Switch Package - Turck AC (Ni2-Q6.5-ADZ32-0.16-FB5.4X2-S304)

for PG-38 ~ No. 753700A for PG-45 ~ No. 753600A



	Α		
PG-38 w/AC	26.2 [1.03]		
PG-45 w/AC	29.0 [1.14]		

#### Components

ITEM	DESCRIPTION	QTY	PG-38	PG-45	
1 2 3 4 5 6 7 8 9 10	DC Status Controller* AC Status Controller Screw Sensor Block Screw Sensor Can Retainer Prox Target End Cap Seal	2 1 1 1 1 1 1	PG-38 018426 019328 016452 753701A 018495 744303A 005241 739501A 744401A 020293 016643	PG-45 018426 019328 016452 753601A 018495 744303A 005241 739501A 744301A 020293 000271	
11	O Ring Sensing Rod	1	734301A	734201A	

\*Other available switch brands:

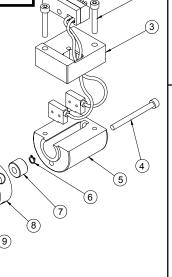
#### Pepperl + Fuchs RSPP-DC

TRSPP-DC (Transposed)

#### **Allen Bradley** RSPAB-DC

TRSPAB-DC (Transposed)

(10)



Supplied

w/ Switch

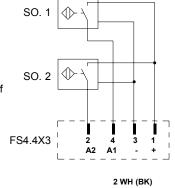
(2)

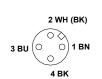
DC ~ Status Controller Two Sensors

Supply Voltage: 10-30 VDC Load Current: ≤150mA Single Connector ~ Conprox®

SO. 2 reads the closed position of the gripper.

If SO. 2 is required for the open position (transposed), order: TRSPT-DC





AC ~ Status Controller

Two Sensors

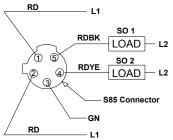
Supply Voltage: 20-250 VAC Load Current: ≤100mA

Single Connector ~ S85

SO. 2 reads the closed position of the gripper.

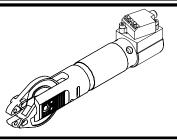
If SO. 2 is required for the open position (transposed), order: TRSPT-AC

Ð RDYE GN RD L1



# BTM CORPORATION

# PG-38 & PG-45 Accessories



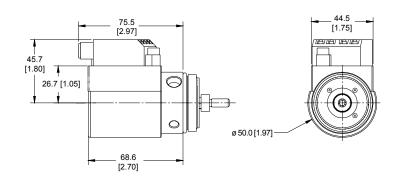
#### **Position Sensors**

Single Connector C2000 Cylindicator
DC Proximity Switch
Senses Open & Closed Positions

#### **RSPN-DC**

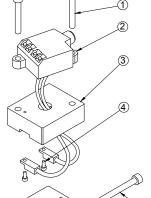
Rear Switch Package - Namco DC EE280-92140

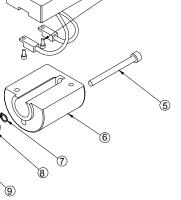
> for PG-38 ~ No. 744400A for PG-45 ~ No. 744300A



#### Components

ITEM	DESCRIPTION	QTY	PG-38	PG-45	
1	Screw	2	018491	018491	
2	DC Cylindicator	1	019126	019126	
	AC Cylindicator	1	019327	019327	
3	Sensor Block	1	744402A	744302A	
4	Screw	2	019287	019287	
5	Screw	1	018495	018495	
6	Sensor Can	1	744303A	744303A	
7	Retainer	1	005241	005241	
8	Prox Target	1	739501A	739501A	
9	End Cap	1	744401A	744301A	
10	Seal	1	020293	020293	
11	O Ring	1	016643	000271	
12	Sensing Rod	1	734301A	734201A	



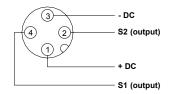


11

**DC** ~ Cylindicator Two 3-Wire Sensors

Supply Voltage: 10-30 VDC Load Current: 200mA Max. Single Connector ~ Euro

SO. 2 reads the closed position of the gripper. If SO. 2 is required for the open position (transposed), order: TRSPN-DC



AC ~ Cylindicator

Two Wire

Supply Voltage: 20-150 VAC Load Current: 200mA Max. Single Connector ~ Micro

SO. 2 reads the closed position of the gripper. If SO. 2 is required for the open position (transposed), order: TRSPN-AC

