

Controls for a world in motion

**Outdoor Power
Equipment Controls**



Creative solutions for every application

- Outdoor Power Equipment of All Kinds
- ZTRs
- Recreational Equipment
- Rotary Mowers
- Tillers
- Snow Blowers
- Commercial Garden Equipment
- Consumer Garden Equipment
- Garden Tractors
- ATVs
- Motorized Wheel Barrows

Rugged, dependable, flexible in design, environmentally friendly, unlimited mounting options, custom designed and built for a perfect fit in every application.

Applications:

- Throttle Controls
- Ground Drive Engagement
- Speed Controls
- Choke Controls
- MZR - Blade Engagement Controls
- Blade Brake Clutch Controls (BBC)

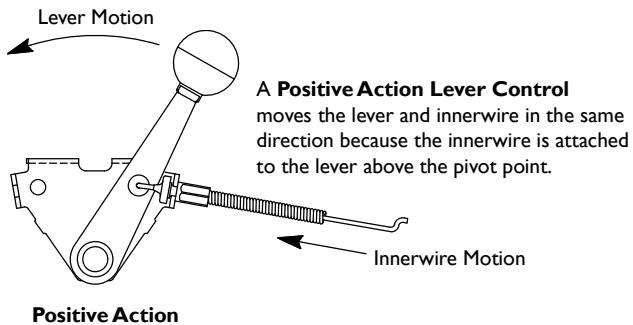
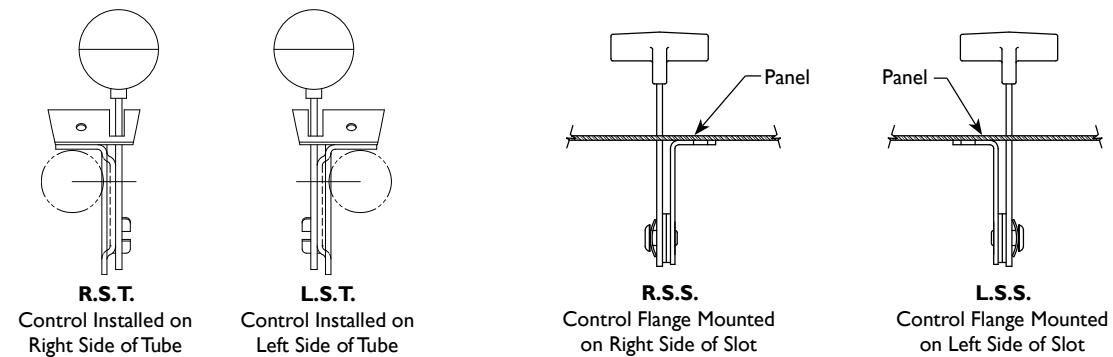
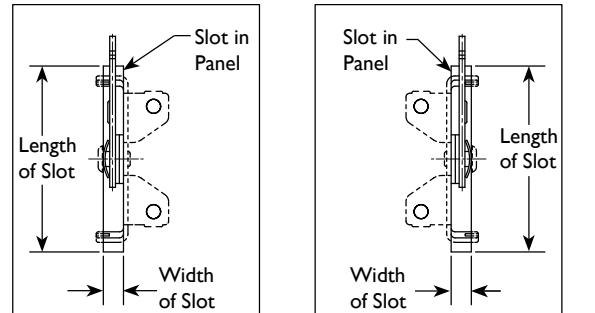
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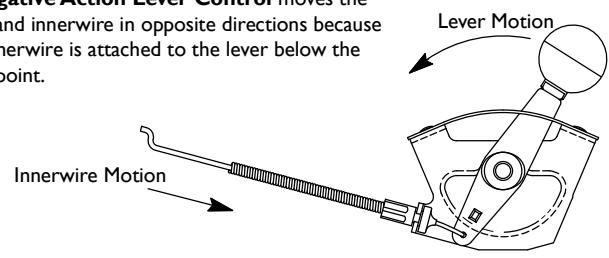
General Design Information

Metal Lever and Bracket with Rivet Construction

- Panel mount control at horizontal flange with screw type fasteners or handlebar mount
- Negative or Positive Action type
- Material finish, knob color and shape, cover plate instructions
- Travel and detent locations to fit the applications
- Environmental considerations, such as wipers and seals

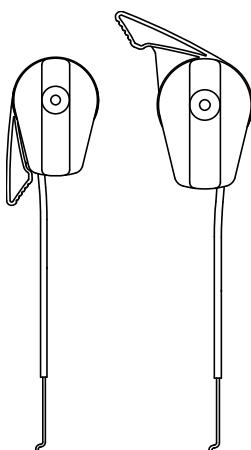


A **Negative Action Lever Control** moves the lever and innerwire in opposite directions because the innerwire is attached to the lever below the pivot point.



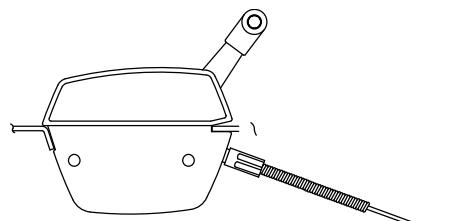
All Plastic Controls

- Controls with plastic lever and cases are usually more cost effective especially when the design snaps together
- Most designs can be interchanged between negative and positive action
- More susceptible to damage than metal controls and limited to relatively low innerwire loads



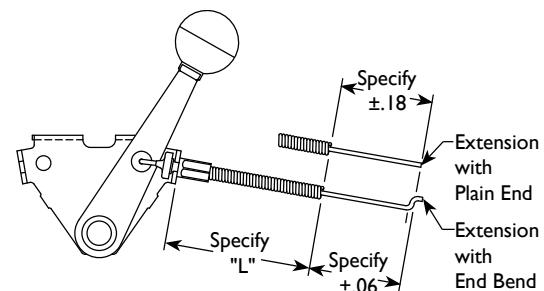
Metal Controls with Plastic Cases

- Some metal controls can be housed in plastic cases to enhance aesthetics
- Plastic cases can be mounted more readily in panels and still have handlebar mounting options
- Control instructions can be placed on the cases



Dimensioning and Tolerances

Control Length "L"	Tolerance
00.00" - 23.99"	±.12
24.00" - 59.99"	±.18
60.00" - 119.99"	±.25
120.00" - 240.00"	±.50



General Design Information

Solid Innerwire Selection Factors/Design Practices

Efficient, economical transmission of linear motion is provided by push-pull conduit and innerwire assemblies. They transmit motion between two fixed points or between points which are changing their relative position. These controls can be routed up, down, over obstacles, even around corners, without intermediate links or pulleys.

Typical applications range from throttle and choke controls for outdoor power equipment to automotive vent and hood controls.

Unlike tension cables, these controls can transmit motion in both the "push" and "pull" directions. However to fully utilize this capability, these controls must be properly integrated into the complete design of the product.

The following describes the various types of Controls, discusses their advantages and limitations and the design practices necessary to obtain efficient motion transfer.

Input or Output Form

Basically, all push-pull controls, transmit motion by linear displacement of a solid innerwire relative to fixed, flexible conduit (Figure 1).

Construction

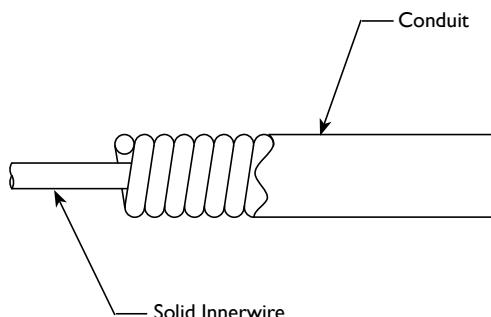


Figure 1

In general, control cost is a function of capacity and performance capabilities. The ideal control is one which meets, but does not necessarily exceed, performance demands.

Minimum bend radii necessary to prevent the innerwire from taking a permanent set are proportional to innerwire diameter. Therefore, the load capacity advantage of the larger innerwire is counter balanced. In many installations, by the difficulties of providing adequate bend radii.

A simple control composed of innerwire and spirally wrapped wire conduit is shown in Figure 2.

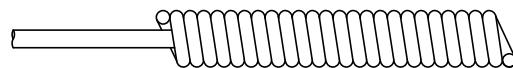


Figure 2

Load Capacities

Force transmitting capacity is proportional to the diameter of the innerwire, the size of the conduit and the innerwire extension. Maximum recommended push loads are usually about 50 percent of the maximum recommended pull loads.

Service Life

Even though the innerwire is continuously flexed during operation, the loads in a properly selected innerwire are low enough that the fatigue failure is not normally a problem.

Bend Radii

Bends in the conduit must be of sufficient radii to permit the innerwire to flow smoothly without acquiring a permanent set. Minimum recommended radii may vary from 5 to 9 inches, depending upon innerwire diameter and construction.

Bends with radii smaller than the recommended minimum values will produce excessive friction and reduce service life. As a rule of thumb, figure minimum bend radius by multiplying innerwire diameter by 100.

Example: For .062 diameter innerwire, multiply .062 by 100 to obtain a 6 inch bend radius.

Normally, load capacity decreases as the travel range increases.

The innerwire provides angular motion by simple deflection of the exposed portion of the innerwire. This deflection should normally be limited to 5 degrees either side of the normal straight position.

General Design Information

Solid Innerwire Selection Factors/Design Practices

Lost Motion

The difference between input and output movement, Figure 1, is often the most troublesome factor in control applications. However, if minimum lost motion is an essential performance requirement, it can be provided by proper application techniques.

Lost motion can result both from innerwire deflection and backlash. The clearance necessary between innerwire and conduit permits lost motion.

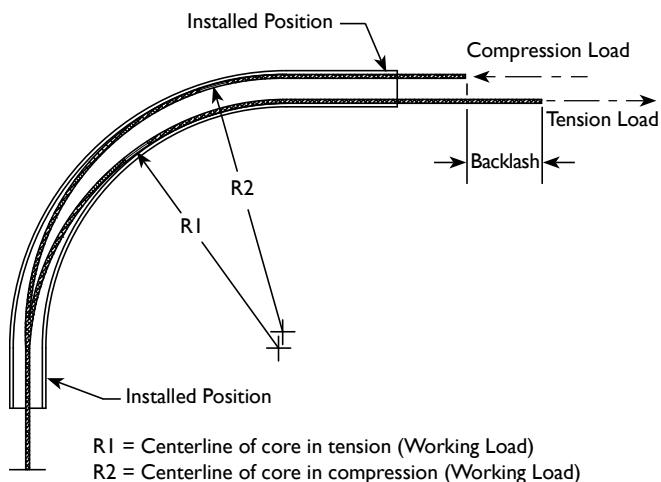


Figure 1

1. Deflection - Deflection loss results from "snaking" of the innerwire under compression loads. Snaking depends primarily upon the amount and uniformity of clearance between the innerwire and the conduit. A minimum uniform clearance permits the minimum snaking of column-action buckling of the innerwire when it is under compression loads.

2. Backlash (or lost motion) - is caused by clearance between the core diameter and the inside diameter of the conduit. It is present in both the push and pull modes of operation. Backlash is directly proportional to the total degrees of bend in the installed routing and the clearance between the O.D. of the core and the I.D. of the conduit.

Friction

Even if an innerwire appears to be perfectly straight, there will be a nominal friction loss. Control specifications usually include the necessary data to determine friction loss as a function of the total curvature of the conduit.

Design Procedure

1. Determine
 - a. Maximum load in each direction required at output end.
 - b. Permissible lost motion.
 - c. Travel required.
 - d. Range of operating temperatures.
 - e. Other unfavorable conditions such as dust, dirt, moisture, chemical corrosion, etc.
2. Use as few bends as possible and keep bend radii as large as possible.
3. Provide positive location points for each end of the conduit. Total length of the conduit assembly can now be estimated.
4. Determine the proposed installation, duplicating and relative location of the input and output ends, the load required at the output end, as well as the proposed routing and clamping arrangement.
5. Exact innerwire length can be determined now. It should be just enough to provide adequate length when all the manufacturing tolerances of the machine components are combined to produce the maximum overall length. Excess innerwire length necessitates extra bends, which add to the lost motion and friction load.

Operating Environment

To obtain satisfactory service life, the operating environment must be considered. For example, dust, moisture, heat, chemical corrosion and mechanical damage can lead to premature control failure.

Dust and moisture damage can be controlled by using a lined and or covered conduit. For excessively dusty conditions, a wiper seal may be required.

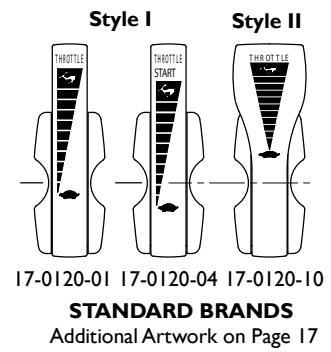
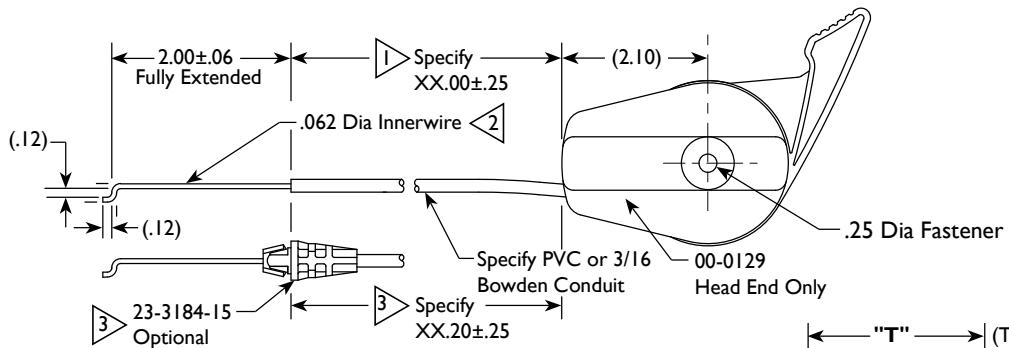
Chemical corrosion and heat damage are usually controlled by the choice of materials.

Plastic covered conduit is often used to provide the maximum corrosion protection.

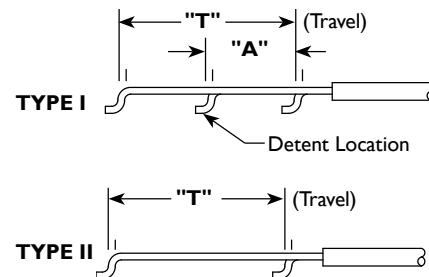
Mechanical damage may occur during regular use of the equipment or during overhaul or repair. The conduit should be routed so that it is protected by the basic machine structure, or if this is not practical, additional mechanical protection should be provided in areas of likely damage.

Negative Action Controls

12-1331 (R.S.T. or L.S.T. Mount)

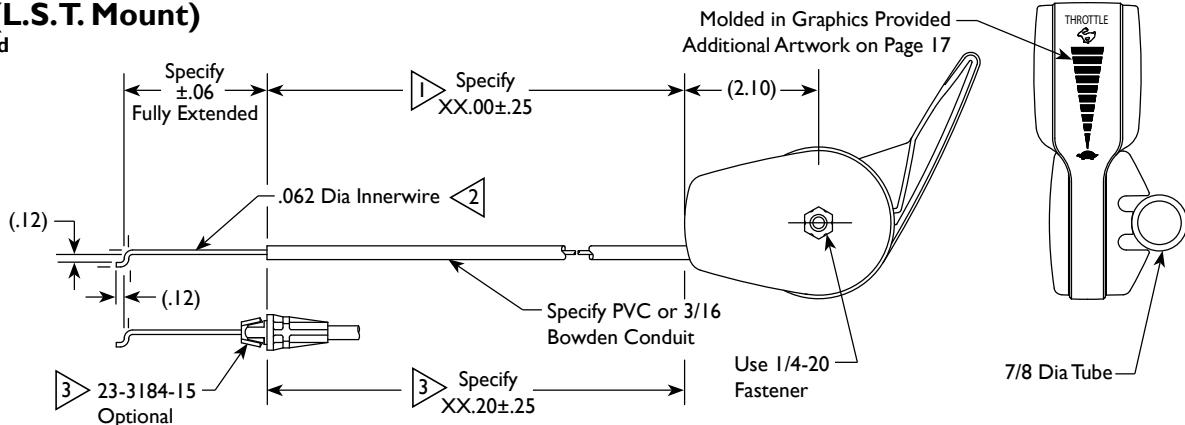


Style	Case Part No.	17-0120 Brand		Type	"T"	"A"
		Narrow	Wide			
I	23-3412-01 23-3411-04	-04	-	I	1.58	.46
II	23-3412-01 23-3411-01	-01	-10	II	1.58	-
I	23-3412-01 23-3411-05	-05	-	I	1.58	.58



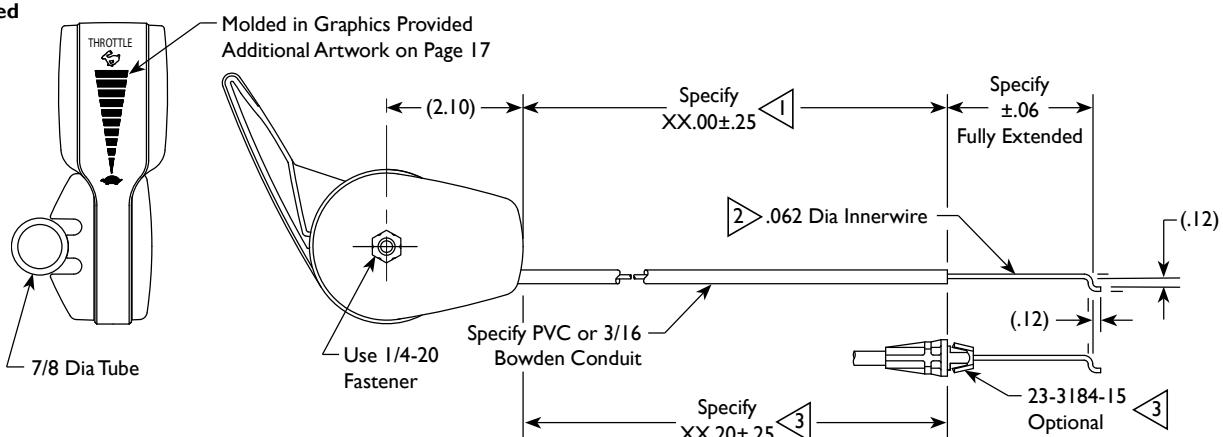
12-1341 (L.S.T. Mount)

Non-Detented



12-1343 (R.S.T. Mount)

Non-Detented



NOTES:

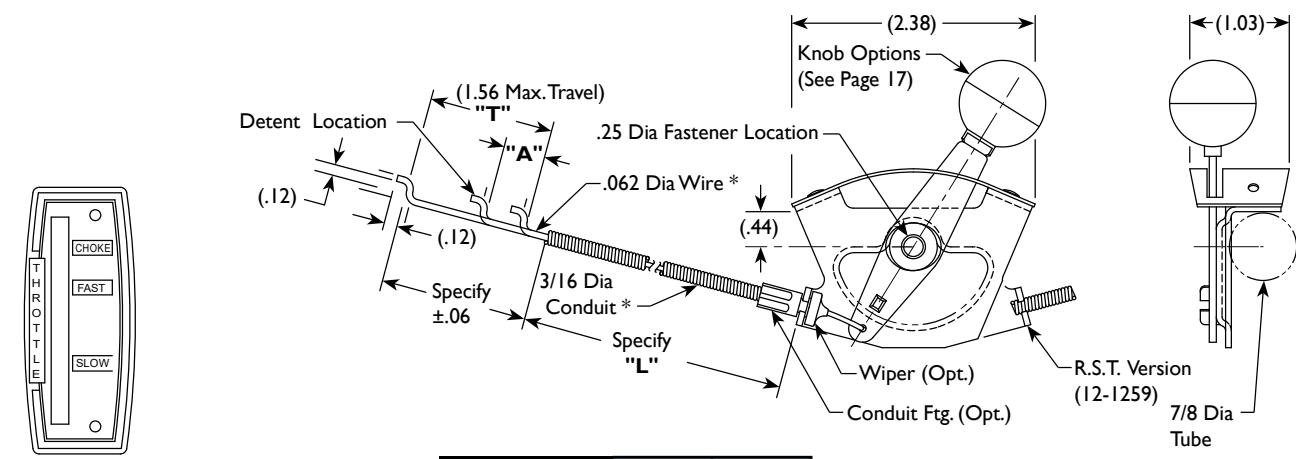
- 1 Specify control length in whole inch increments for PVC conduit.
- 2 Material options available (galvanized or stainless steel).
- 3 With conduit fitting, specify control length in whole inch increments +.20 as shown (i.e. 24.20) for PVC conduit.

Negative Action Controls

12-1258 (L.S.T.) Shown/12-1259 (R.S.T.) Opposite

Materials: Lever 13 Ga. (.090)
Bracket 14 Ga. (.075)

Finish: Plated for Corrosion Protection
* Material Options Available (Galv. or S.S.)



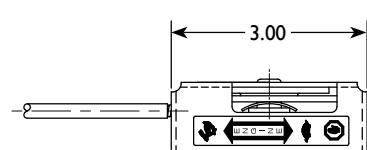
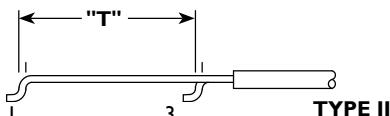
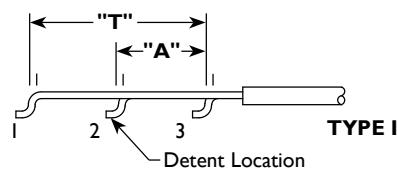
80-2171-15
COVER PLATE

Config.	"T"	"A"
24-1258 (L.S.T.)	(1.32)	(.32)

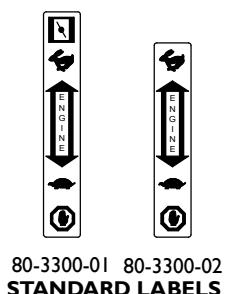
12-3100 (R.S.T.) Shown/12-3200 (L.S.T.) Opposite

Finish: Black Polyurethane for Corrosion Protection
* Material Options Available (Galv. or S.S.)

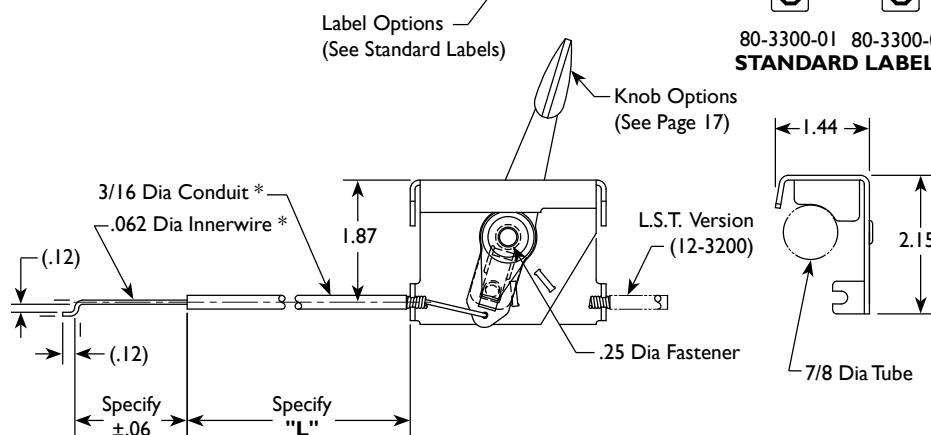
Series	Config.	Type	"T"	"A"	Detent Position
12-3100	24-0060	II	1.00	-	-
	24-3167	I	1.18	.75	2
	24-3152	II	.88	-	3
	24-3169	II	1.23	-	-
12-3200	24-3153	I	1.56	.40	2
	24-3168	II	1.23	-	-
	24-3170	II	1.18	-	1



Label Options
(See Standard Labels)



80-3300-01 80-3300-02
STANDARD LABELS



Negative Action Controls

I2-3020 (LST or RSS) Shown, I2-3040 (RST or LSS) Opposite (3/4" Dia Handlebar or Panel Mount)

I2-3060 (LST or RSS) Shown, I2-3080 (RST or LSS) Opposite (7/8" Dia Handlebar or Panel Mount)

Materials: Lever 13 Ga. (.090)

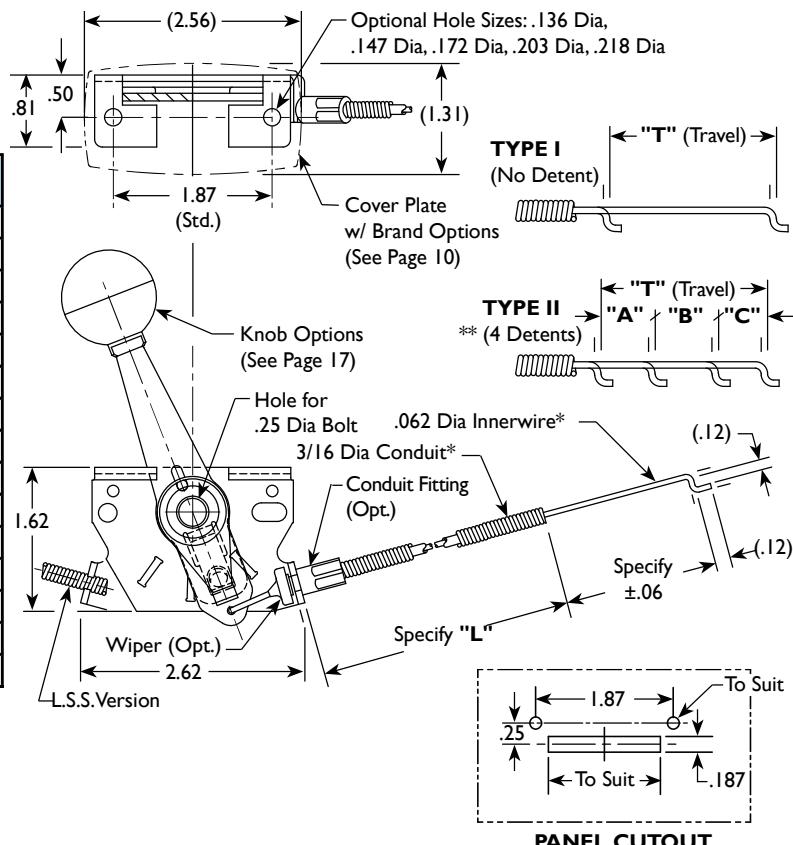
Bracket 14 Ga. (.075)

Finish: Plated for Corrosion Protection

* Material Options Available (Galv. or S.S.)

** Detent Options Available

Part No.	Config.	Type	"T"	"A"	"B"	"C"	Hole Size	Tube Dia
I2-3020 LST or RSS	24-6032	I	1.18	-	-	-	.203	.75
	24-7022	II	1.62	.43	.65	(.50)	.136	.75
	24-7021	II	1.62	.43	.65	(.50)	.218	.75
	24-7020	II	1.62	.43	.65	(.50)	.172	.75
I2-3040 RST or LSS	24-6003	I	1.62	-	-	-	.218	.75
	24-7045	II	1.62	.43	.65	(.50)	.172	.75
	24-6001	I	1.18	-	-	-	.136	.75
	24-7019	II	1.62	.43	.65	(.50)	.136	.75
I2-3060 LST or RSS	24-7016	II	1.62	.43	.65	(.50)	.136	.87
	24-6006	I	1.62	-	-	-	.136	.87
	24-6051	I	.56	-	-	-	.136	.87
I2-3080 RST or LSS	24-7014	II	1.62	.43	.65	(.50)	.147	.87
	24-6002	I	1.18	-	-	-	.136	.87
	24-7015	II	1.62	.43	.65	(.50)	.136	.87
	24-6041	I	.87	-	-	-	.136	.87



PANEL CUTOUT

I2-0620 (LST or RSS) Shown, I2-0640 (RST or LSS) Opposite (3/4" Dia Handlebar or Panel Mount)

I2-0660 (LST or RSS) Shown, I2-0680 (RST or LSS) Opposite (7/8" Dia Handlebar or Panel Mount)

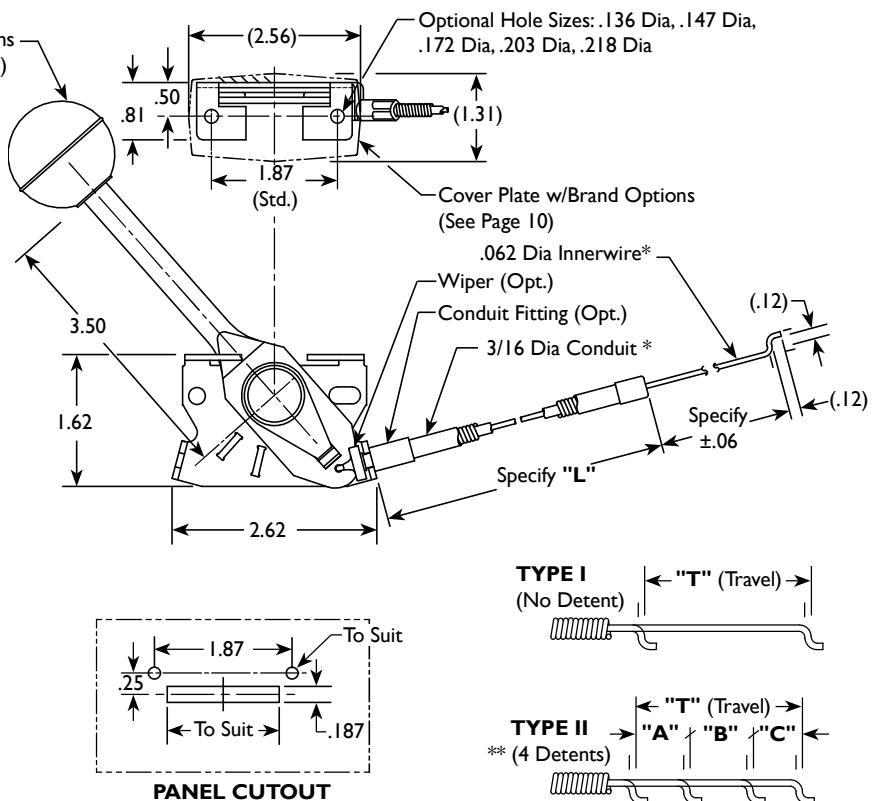
Materials: Lever 3/8 Dia.

Bracket 14 Ga. (.075)

Finish: Plated for Corrosion Protection

* Material Options Available (Galv. or S.S.)

Part No.	Type	"T"	"A"	"B"	"C"	Hole Size	Tube Dia
I2-0620 LST or RSS	I	1.18	-	-	-	.203	.75
	II	1.62	.43	.65	(.50)	.136	.75
	II	1.62	.43	.65	(.50)	.218	.75
	II	1.62	.43	.65	(.50)	.172	.75
I2-0640 RST or LSS	I	1.62	-	-	-	.218	.75
	II	1.62	.43	.65	(.50)	.172	.75
	I	1.18	-	-	-	.136	.75
	II	1.62	.43	.65	(.50)	.136	.75
I2-0660 LST or RSS	II	1.62	.43	.65	(.50)	.136	.87
	I	1.62	-	-	-	.136	.87
	I	.62	-	-	-	.136	.87
I2-0680 RST or LSS	II	1.62	.43	.65	(.50)	.147	.87
	I	1.18	-	-	-	.136	.87
	II	1.62	.43	.65	(.50)	.136	.87
	I	.87	-	-	-	.136	.87

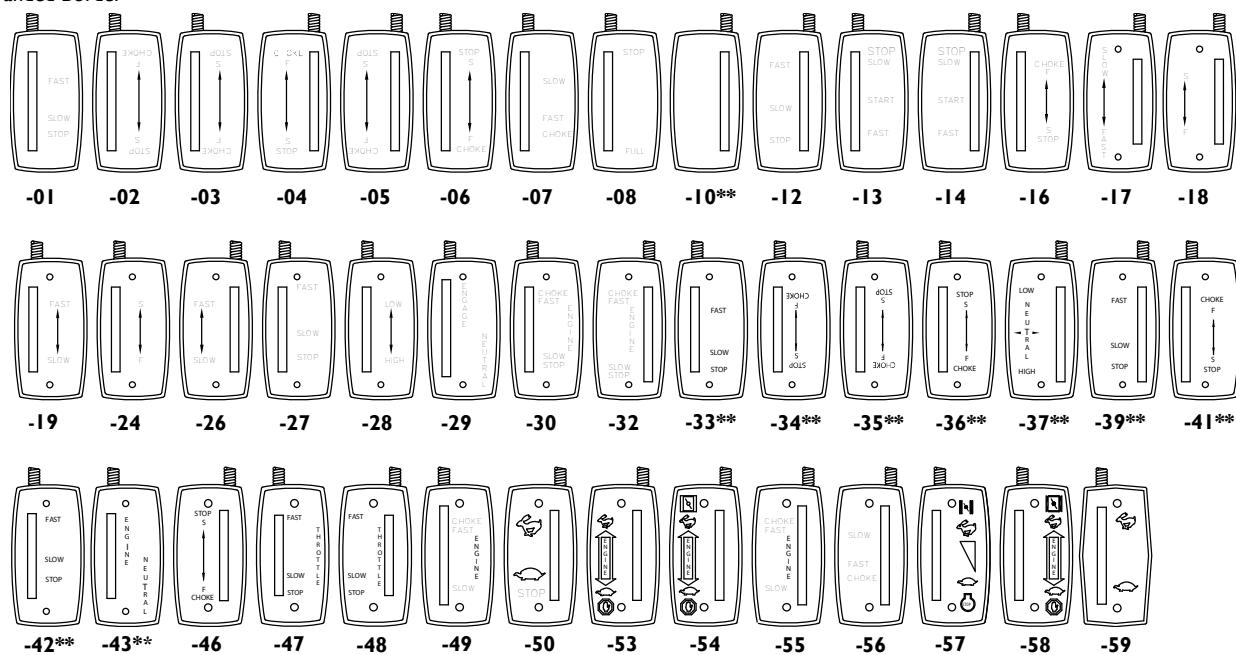


PANEL CUTOUT

Negative Action Controls

25-0560-* Brand Options for 12-3020, 12-3040, 12-3060, 12-3080, 12-0620, 12-0640, 12-0660, 12-0680 Controls

* Insert Dash No.
** Branded Border



12-7609 (L.S.S.) Panel Mount Control

Shown with 8° Detent Location

Materials: Lever 13 Ga. (.090)
Bracket 14 Ga. (.074)

Finish: Plated for Corrosion Protection

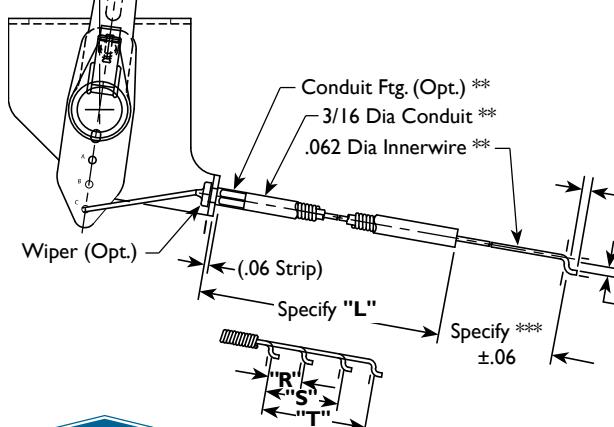
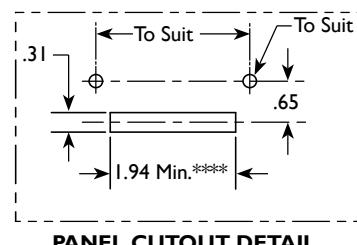
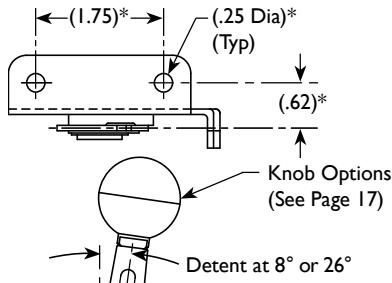
* Standard Mounting Holes

** Material Options Available (Galv. or S.S.)

*** All extension measurements made with lever in detent position.

**** Varies depending on lever rotation. Dims based on 2 1/2" slot length.

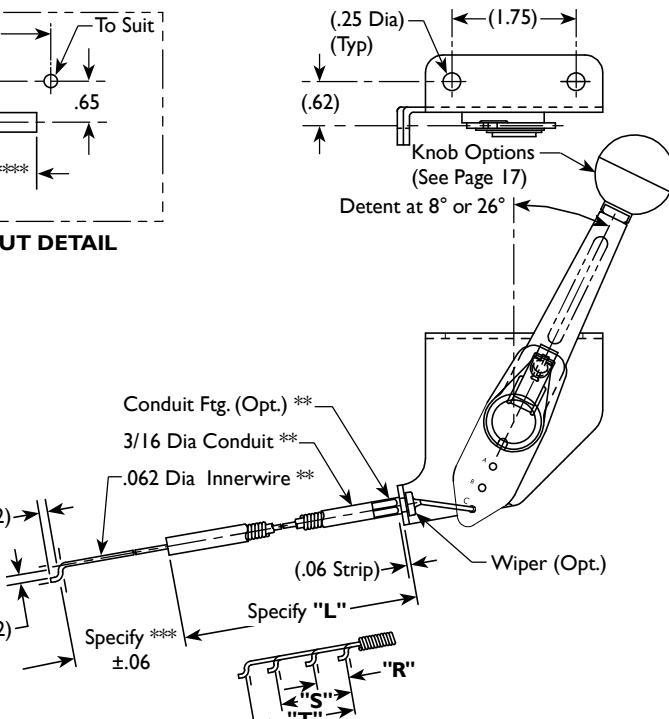
NOTE: Overall control travel is a function of panel slot length not to exceed 3.00 long.



12-7608 (R.S.S.) Panel Mount Control

Shown with 26° Detent Location

Part No.	Lever Hole	Travel****		
		R***	S***	T***
12-7608	A	.46	.64	.68
	B	.79	1.10	1.20
	C	.96	1.38	1.60
12-7609	A	.10	.30	.66
	B	.19	.50	1.16
	C	.20	.62	1.58

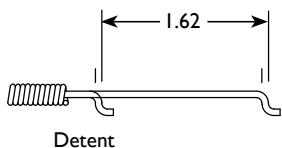
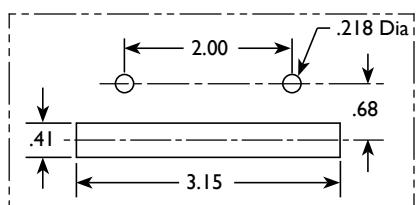
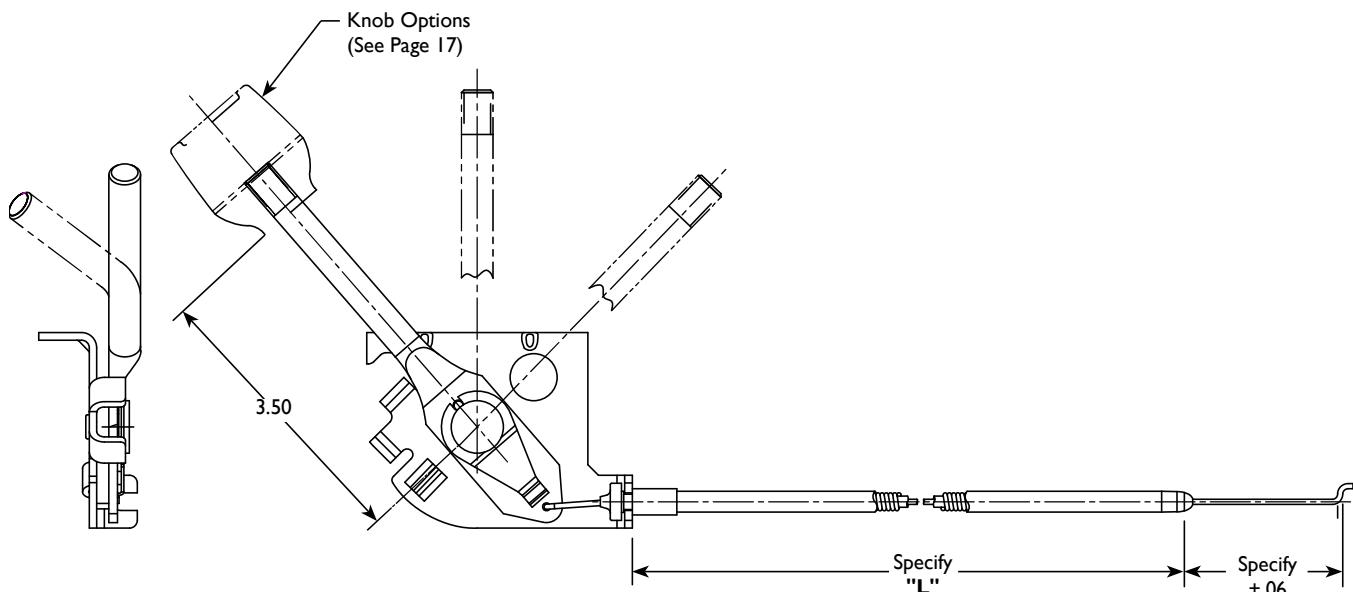
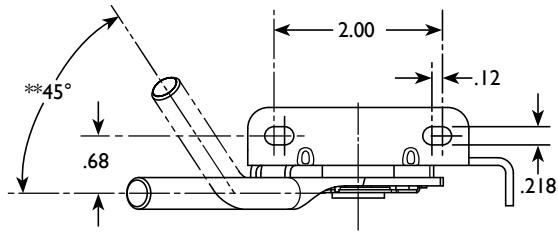


Light Duty Negative Action Commercial Controls

12-0720 (L.S.S.) Panel Mount Control

Materials: 3/8 Dia Lever
Bracket 13 Ga. (.090)

Finish: Plated for Corrosion Protection
* Material Options Available (Galv. or S.S.)
** Lever may be bent at 45 degrees (Specify)
Total Travel 1.62"



PANEL CUTOUT DETAIL

Positive Action Controls

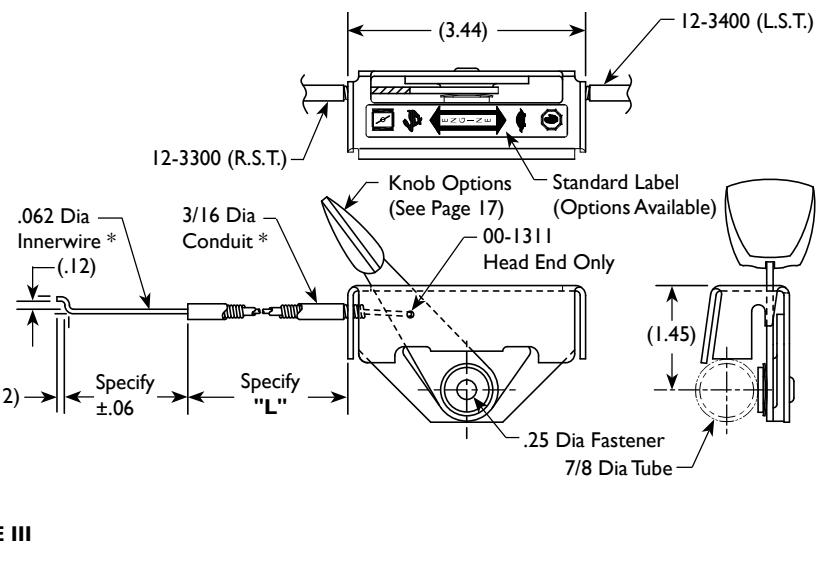
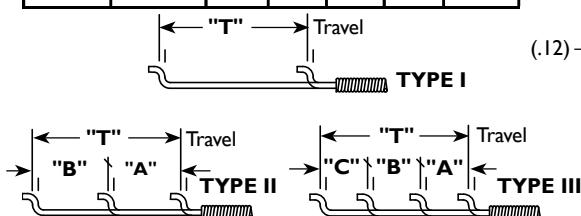
12-3300 (R.S.T.) Shown/12-3400 (L.S.T.) Opposite

Single Bolt Mount

Materials: Lever 13 Ga. (.090)
Bracket 14 Ga. (.075)

Finish: Plated for Corrosion Protection
* Material Options Available (Galv. or S.S.)

Part No.	Config.	Type	"A"	"B"	"C"	Travel
12-3300 (R.S.T.)	24-3304	III	.41	.75	.40	1.56
	24-3303	I	-	-	-	1.56
12-3400 (L.S.T.)	24-3305	II	.50	.50	-	1.00
	24-3302	I	-	-	-	1.56

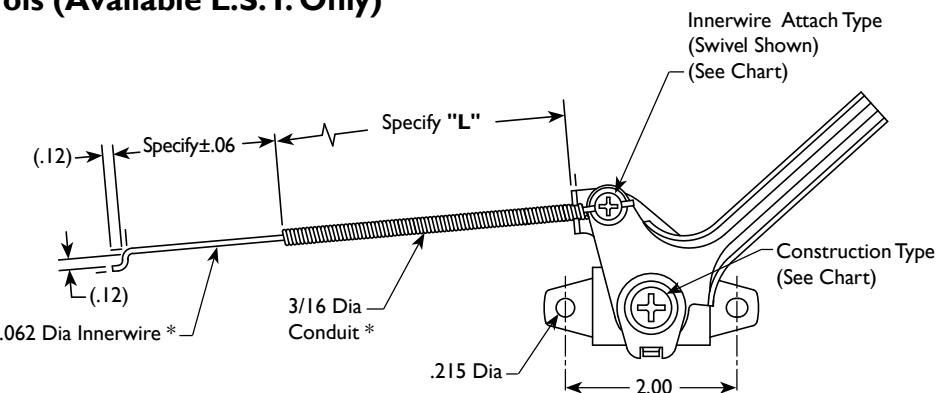


12-1200 Panel Mount Controls (Available L.S.T. Only)

Materials: Lever 16 Ga. (.060)
Bracket 14 Ga. (.075)

Finish: Plated for Corrosion Protection
Travel: 1.75 In
* Material Options Available (Galv. or S.S.)

Config.	Innerwire Attach	Construction Type
24-4639	Swivel	Screw
24-4677	Z-Bend	Rivet
24-4701	Swivel	Rivet

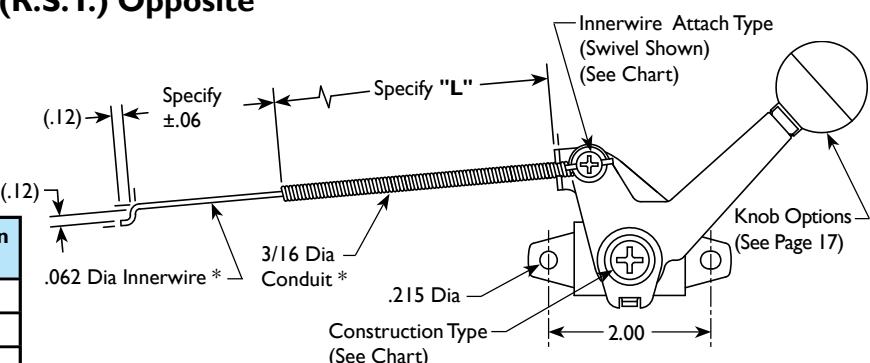


12-1210 (L.S.T.) Shown/12-1211 (R.S.T.) Opposite

Materials: Lever 13 Ga. (.090)
Bracket 14 Ga. (.075)

Finish: Plated for Corrosion Protection
Travel: 1.75 In
* Material Options Available (Galv. or S.S.)

Part No.	Config.	Innerwire Attach	Construction Type
12-1210 L.S.T.	24-4637	Swivel	Screw
	24-4641	Swivel	Screw
12-1211 R.S.T.	24-4678	Z-Bend	Rivet
	24-5300	Z-Bend	Rivet

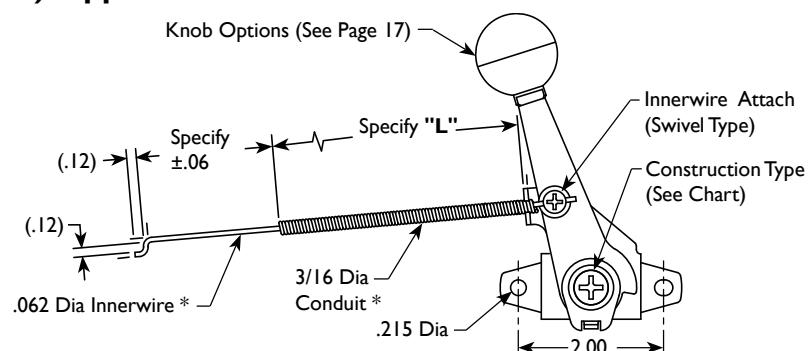


12-1230 (L.S.T.) Shown/12-1231 (R.S.T.) Opposite

Materials: Lever 13 Ga. (.090)
Bracket 14 Ga. (.075)

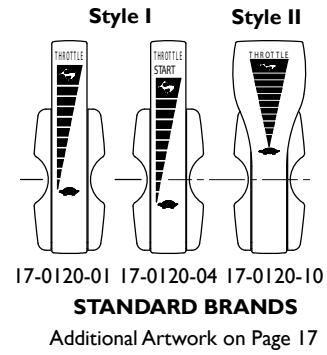
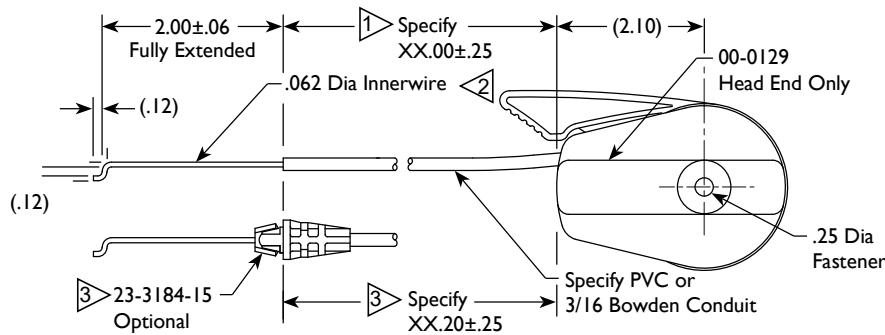
Finish: Plated for Corrosion Protection
Travel: 1.75 In
* Material Options Available (Galv. or S.S.)

Part No.	Config.	Innerwire Attach	Construction Type
12-1230 L.S.T.	24-4635	Swivel	Screw
12-1231 R.S.T.	24-4645	Swivel	Screw

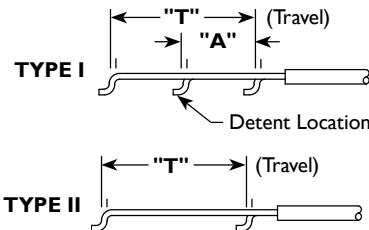


Positive Action Controls

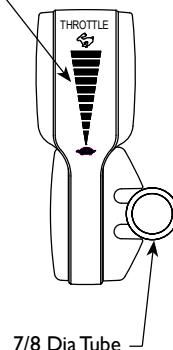
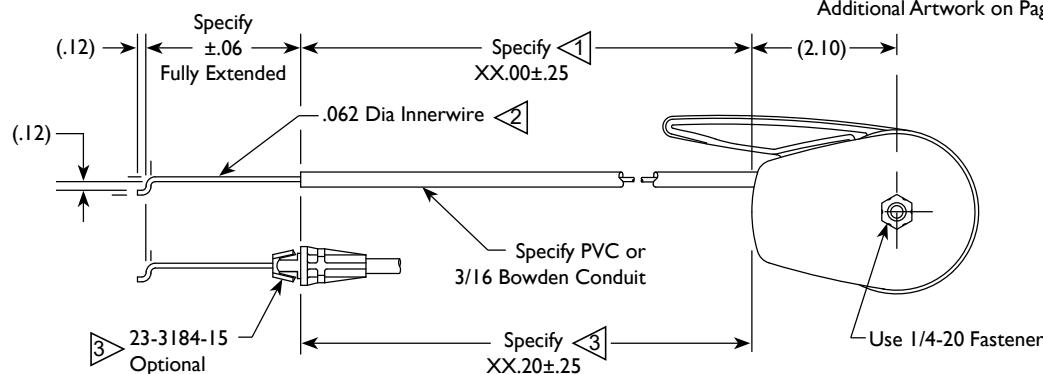
I2-I332 (L.S.T. or R.S.T. Mount)



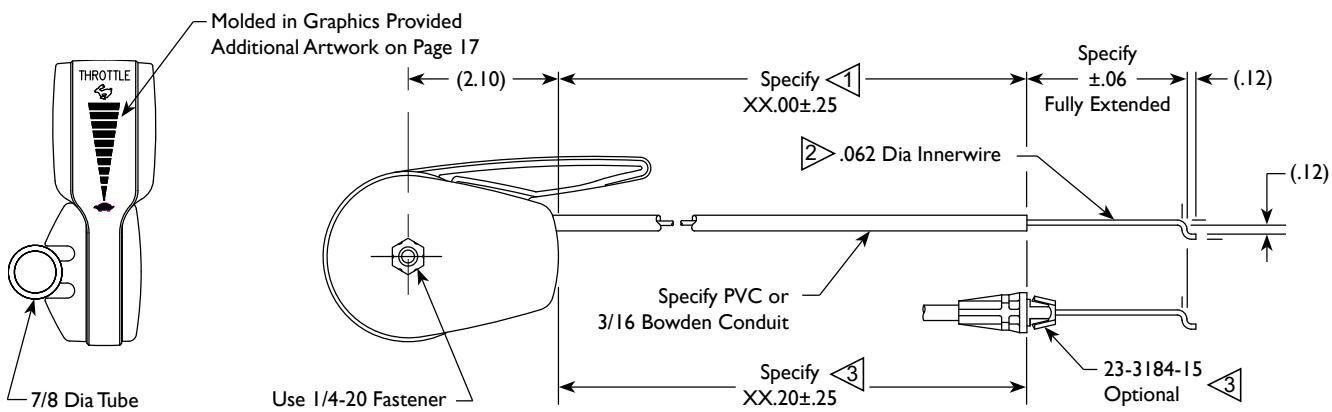
Style	Case Part No.	17-0120 Brand		Type	"T"	"A"
		Narrow	Wide			
I	23-3412-01 23-3411-04	-04	-	I	1.58	.46
II	23-3412-01 23-3411-01	-01	-10	II	1.58	-
I	23-3412-01 23-3411-05	-05	-	I	1.58	.58



12-1342 (L.S.T. Mount)



12-1344 (R.S.T. Mount)



NOTES:

- 1> Specify control length in whole inch increments for PVC conduit.
 - 2> Material options available. (Galv. or S.S.)
 - 3> With conduit fitting, specify control length in whole inch increments +.20 as shown (i.e. 24.20) for PVC conduit.

Positive Action Controls

12-1242 Panel Mount Control

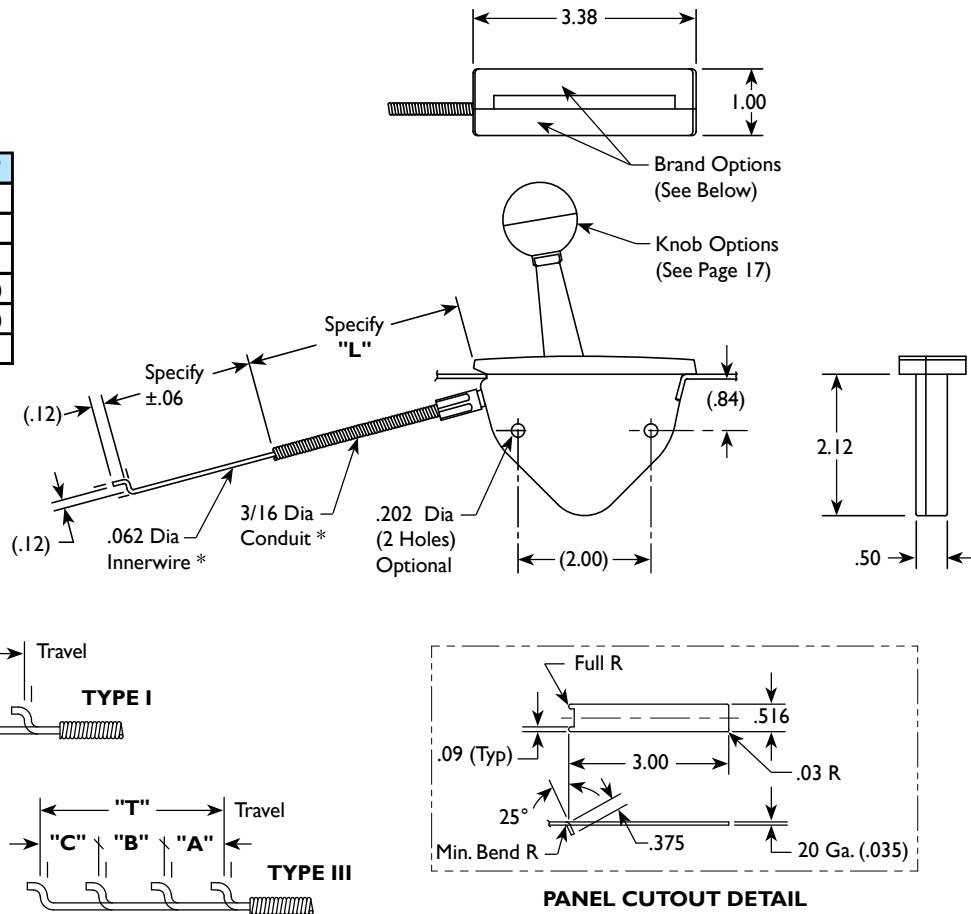
Materials: Lever 13 Ga. (.090)
Bracket 16 Ga. (.060)

Finish: Plated for Corrosion Protection

Case: Black Plastic

* Material Options Available (Galv. or S.S.)

Config.	Type	"T"	"A"	"B"	"C"
24-4817	II	1.25	.38	.87	-
24-4957	I	1.18	-	-	-
24-4977	II	1.24	.75	.49	-
24-4978	III	1.60	.38	.75	(.47)
24-5011	III	1.75	.50	.75	(.50)
24-5089	I	1.00	-	-	-

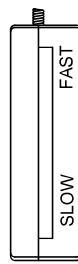


25-1241-* Brand Options for 12-1242 Controls

* Insert Dash No.



-03



-04



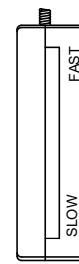
-05



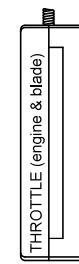
-06



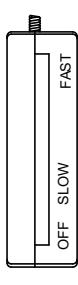
-07



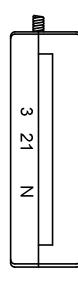
-08



-09



-10



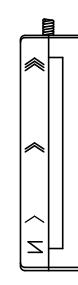
-11



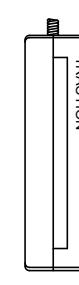
-12



-13



-15



-16



-17



-18

Positive Action Controls

12-1248 Panel or Handle Mount

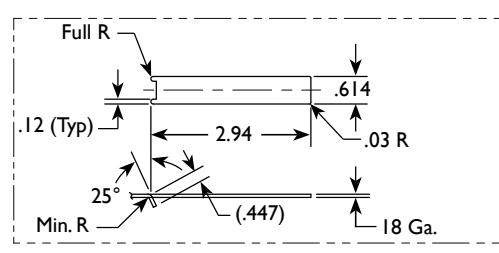
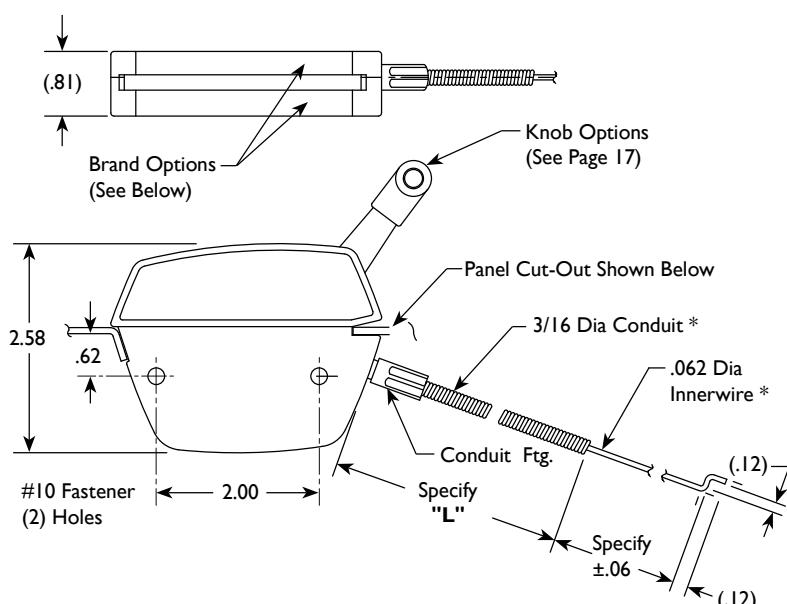
Materials: Lever 13 Ga. (.090)
Bracket 16 Ga. (.060)

Finish: Plated for Corrosion Protection

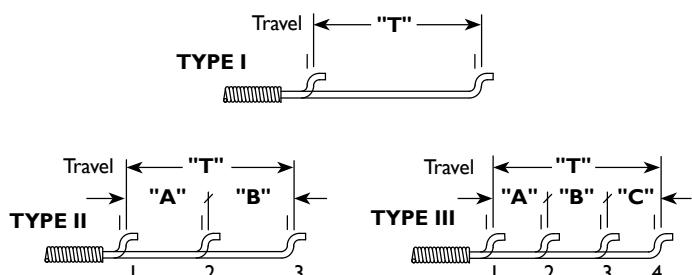
Case: Black Plastic

* Material Options Available (Galv. or S.S.)

Config.	Type	"T"	"A"	"B"	"C"	Detent Position
24-1252	I	1.16	-	-	-	I
24-1254	I	1.16	-	-	-	None
24-1255	I	1.55	-	-	-	None
24-1249	II	1.15	.32	.83	-	2 & 3
24-1248	III	1.50	-	.81	.38	2 & 3
24-4964	II	1.28	-	.97	-	2

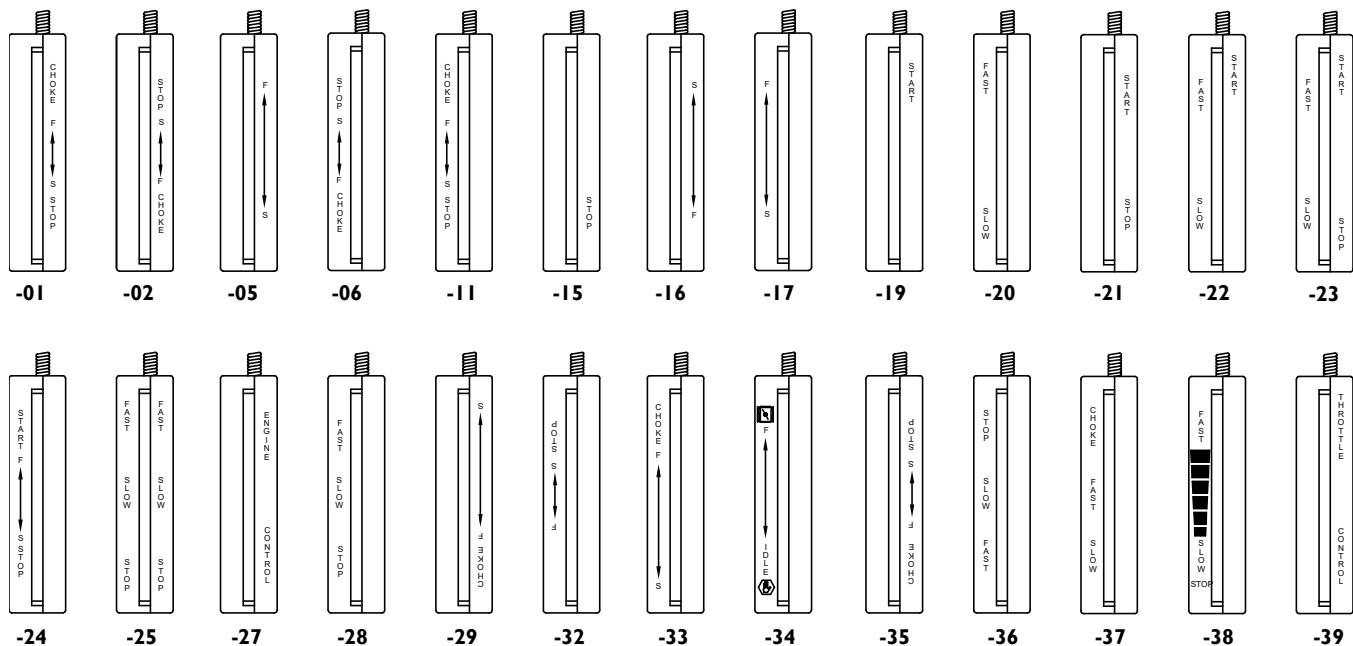


PANEL CUTOUT DETAIL



25-1248 -* Brand Options for 12-1248 Controls

* Insert Dash No.



Positive Action Controls

12-1250-* Single Bolt Tube Mount (L.S.T. or R.S.T.)

Metal Lever Against Plastic Case Detents

Tube Size: 3/4" or 7/8"

Materials: Lever 13 Ga. (.093)

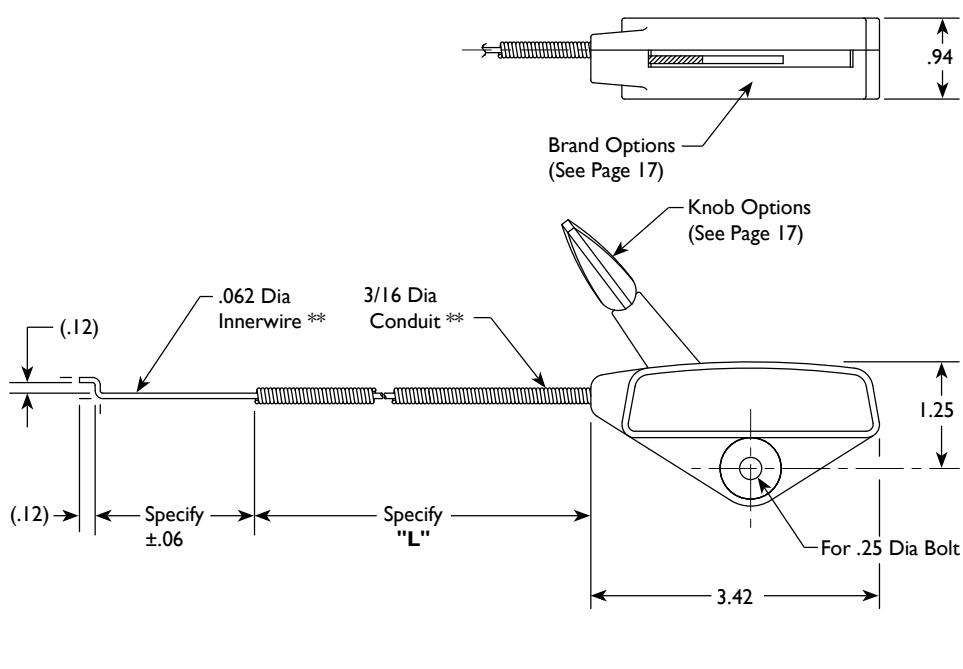
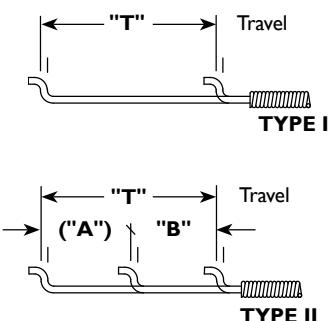
Finish: Plated for Corrosion Protection

* Insert Dash No.

** Material Options Available (Galv. or S.S.)

Dash No.	Type	"T"	("A")	"B"
-18***	II	.88	.31	.37
-19	II	1.31	.31	1.00
-23	I	1.18	-	-
-24***	II	1.18	.81	.37
-78	I	1.37	-	-

***With Eyelet at Mounting Hole



12-1265-* Single Bolt Tube Mount (L.S.T. or R.S.T.)

Metal Lever Against Metal Spring Steel Detent

Tube Size: 3/4" or 7/8"

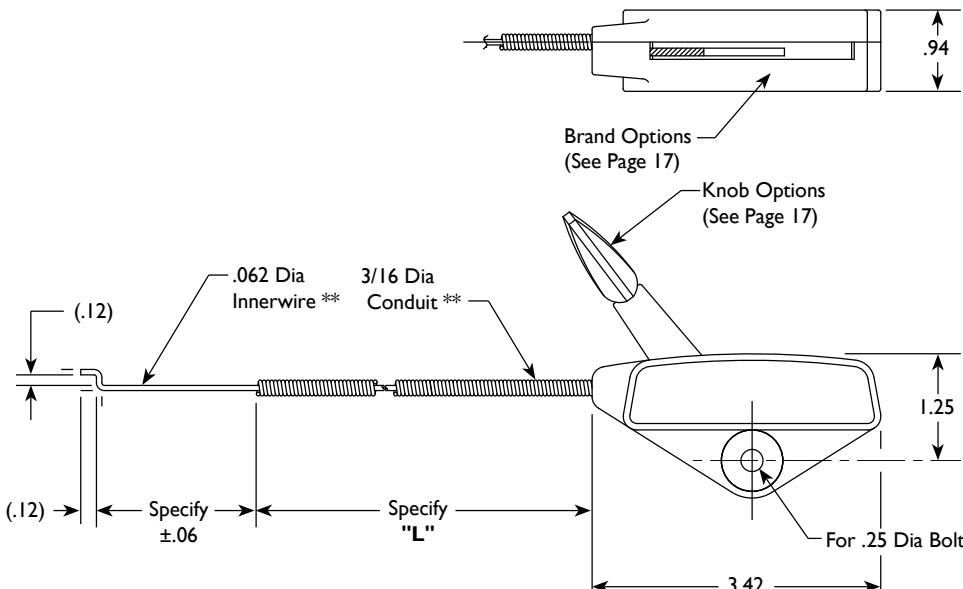
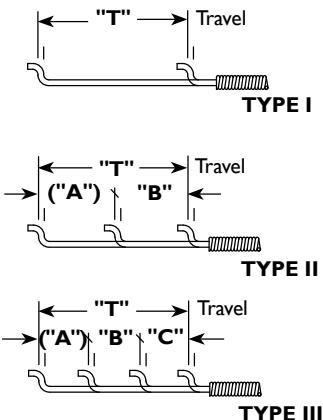
Materials: Lever 13 Ga. (.093)

Finish: Plated for Corrosion Protection

* Insert Dash No.

** Material Options Available (Galv. or S.S.)

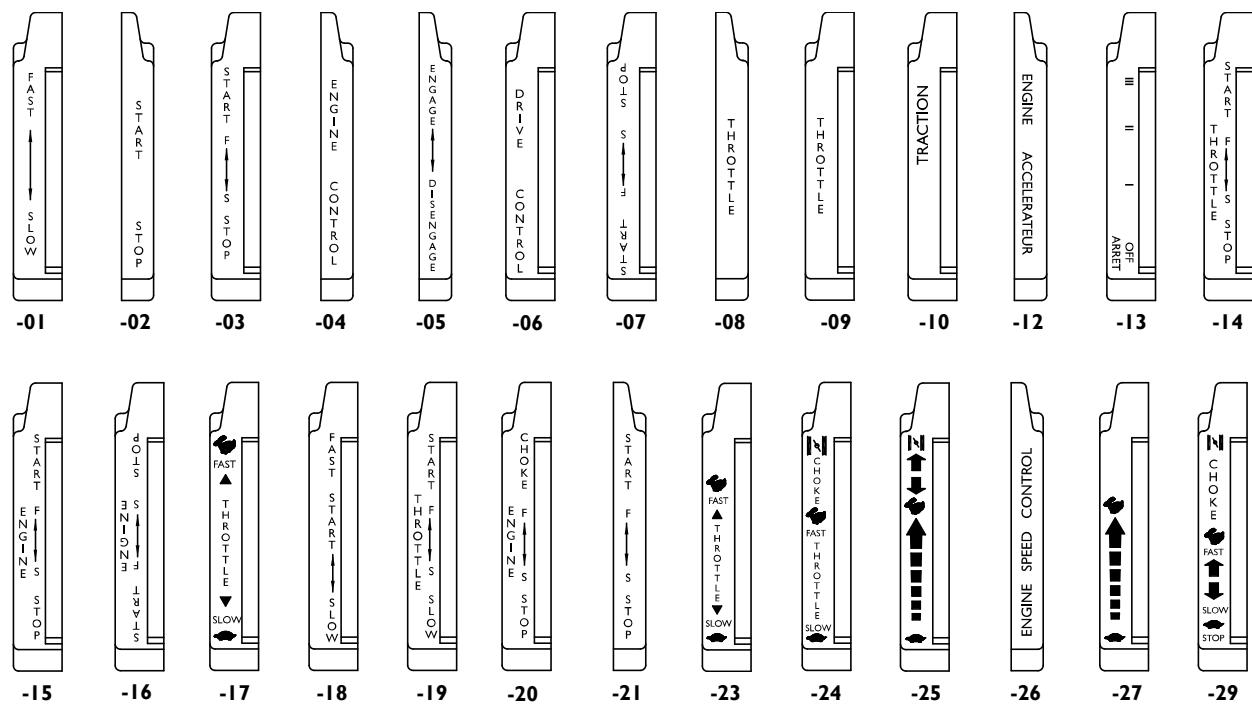
Dash No.	Type	"T"	("A")	"B"	"C"
-01	II	1.38	.43	.95	-
-11	III	1.53	.41	.75	.37
-13	II	1.31	.40	.91	-
-14	I	1.32	-	-	-



Positive Action Controls

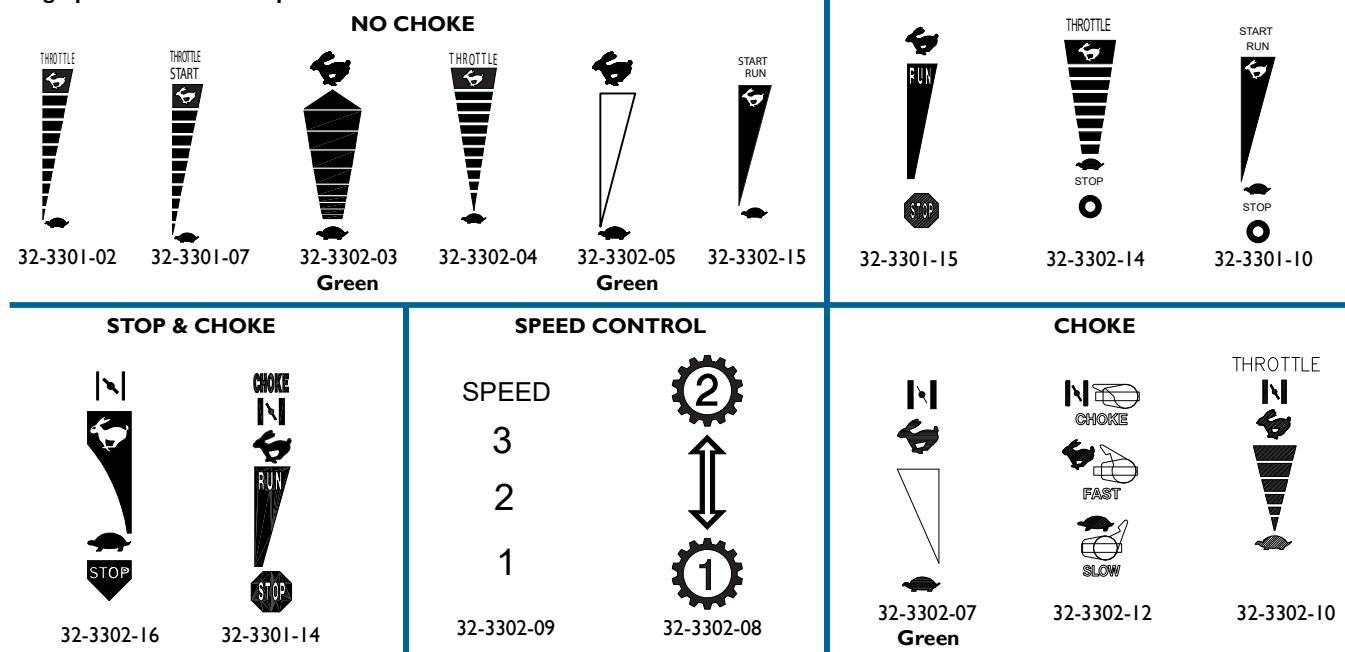
25-0583-* Brand Options for 12-1250 & 12-1265 Controls

* Insert Dash No.

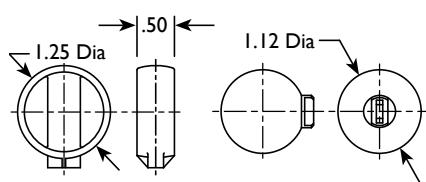


Artwork for 12-1331, 12-1332, 12-1341, 12-1342, 12-1343 & 12-1344

All graphics are white except where noted

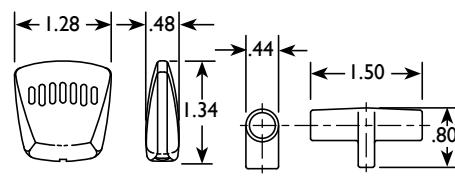


Knob Options

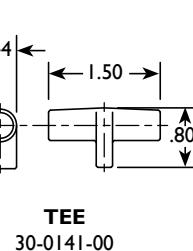


DISC
30-0370-00

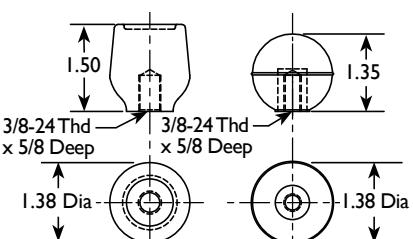
BALL
30-0127-00



PADDLE
30-0134-00



TEE
30-0141-00



HEAVY DUTY KNOBS

Color Options Available

Positive Action Controls

12-2021 (L.S.S.) Shown/12-2020 (R.S.S.) Opposite

Panel Mount Control

Materials: Lever 13 Ga. (.090)
Bracket 14 Ga. (.074)

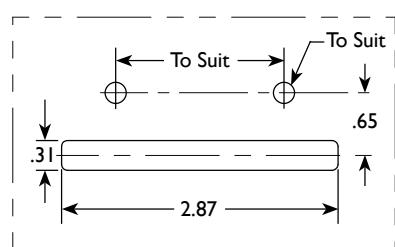
Finish: Plated for Corrosion Protection

* Standard Mounting Holes

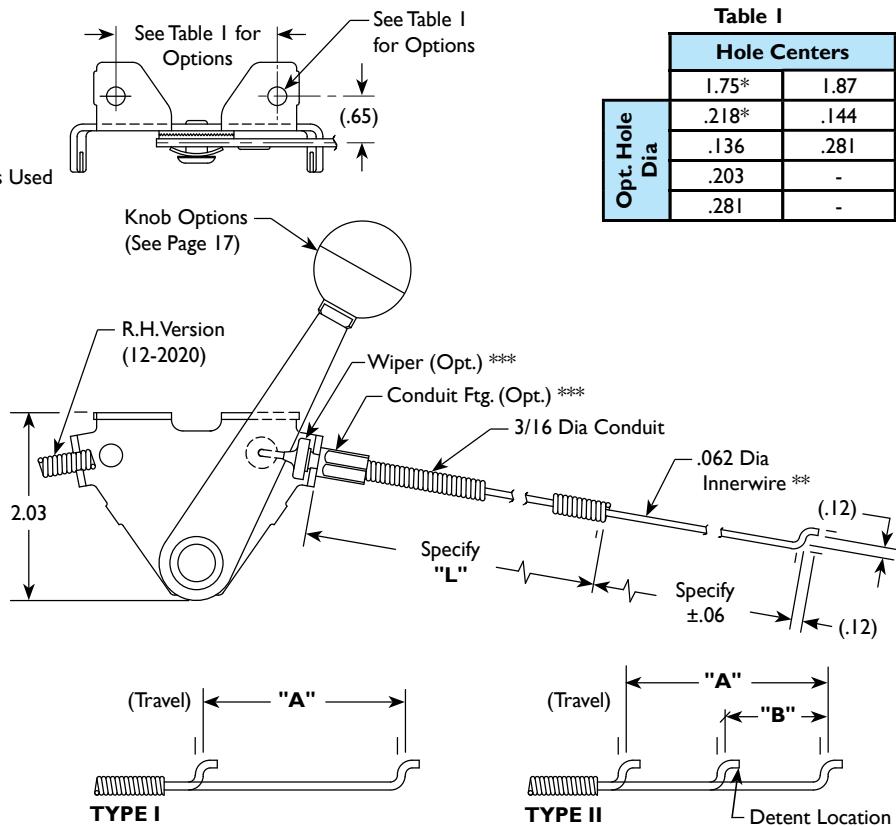
** Material Options Available (Galv.or S.S.)

*** .06 In Less Travel When Conduit Ftg. & Wiper Is Used

Part No.	Type	"A"	"B"
12-2021 L.S.S.	II	1.56	1.10
	II	1.56	.37
	I	1.56	-
12-2020 R.S.S.	II	1.56	.37
	II	1.56	1.10
	I	1.56	-



PANEL CUTOUT DETAIL
See Table I



12-2036 (L.S.S.) Shown/12-2046 (R.S.S.) Opposite

Panel Mount Control

Materials: Lever 13 Ga. (.090)
Bracket 14 Ga. (.074)

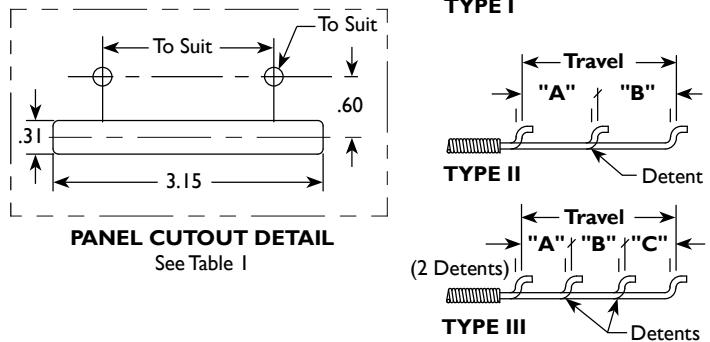
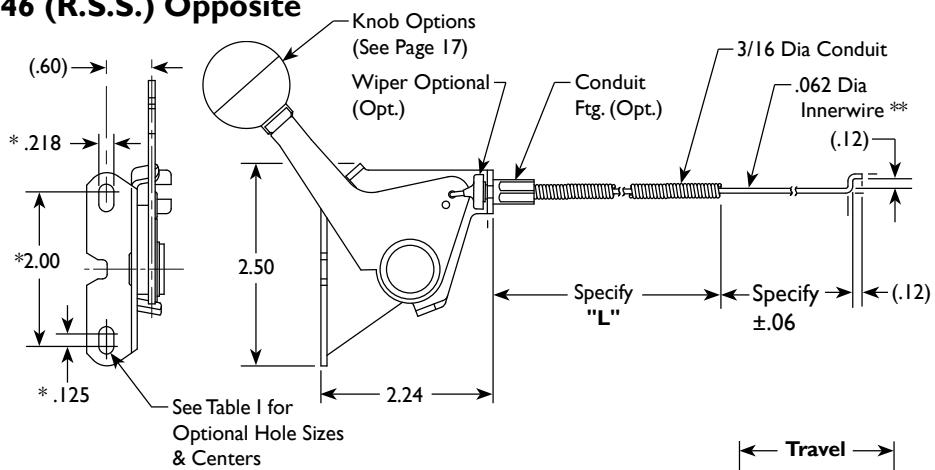
Finish: Plated for Corrosion Protection

* Standard Mounting Holes

** Material Options Available (Galv.or S.S.)

Opt. Hole Dia	Table I		
	Optional Hole & Ctr.		
Opt. Hole Dia	2.00	1.87	1.75
.160	.144	.144	
.166	-	.281	
.203	-	-	
.281	-	-	

Part No.	Type	Hole Pattern	I.63 Travel			I.38 Travel		
			"A"	"B"	"C"	"A"	"B"	"C"
12-2036 L.S.S.	II	Std. Slot	.26	1.37	-	.21	1.17	-
	II	1.87 x .144	1.13	.50	-	.96	.43	-
	II	2.00 x .281	.26	1.37	-	.21	1.17	-
	I	Std. Slot	-	-	-	-	-	-
12-2046 R.S.S.	III	Std. Slot	-	.87	.50	-	.75	.43
	II	Std. Slot	.26	1.37	-	.21	1.17	-
	II	2.00 x .281	.26	1.37	-	.21	1.17	-
	I	Std. Slot	-	-	-	-	-	-



Light Duty Positive Action Commercial Controls

12-0321 (L.S.S.) Shown/12-0322 (R.S.S.) Opposite

Panel Mount Control

Materials: 3/8 Dia Lever
Bracket 14 Ga. (.074)

Finish: Plated for Corrosion Protection

* Standard Mounting Holes

** Material Options Available (Galv. or S.S.)

*** .06 In Less Travel When Conduit Ftg. & Wiper Is Used

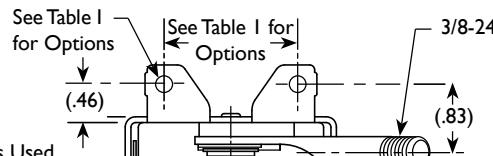
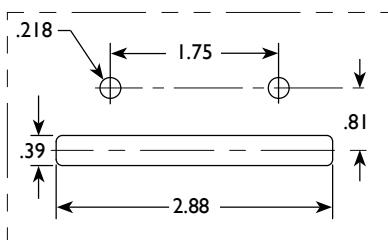


Table I

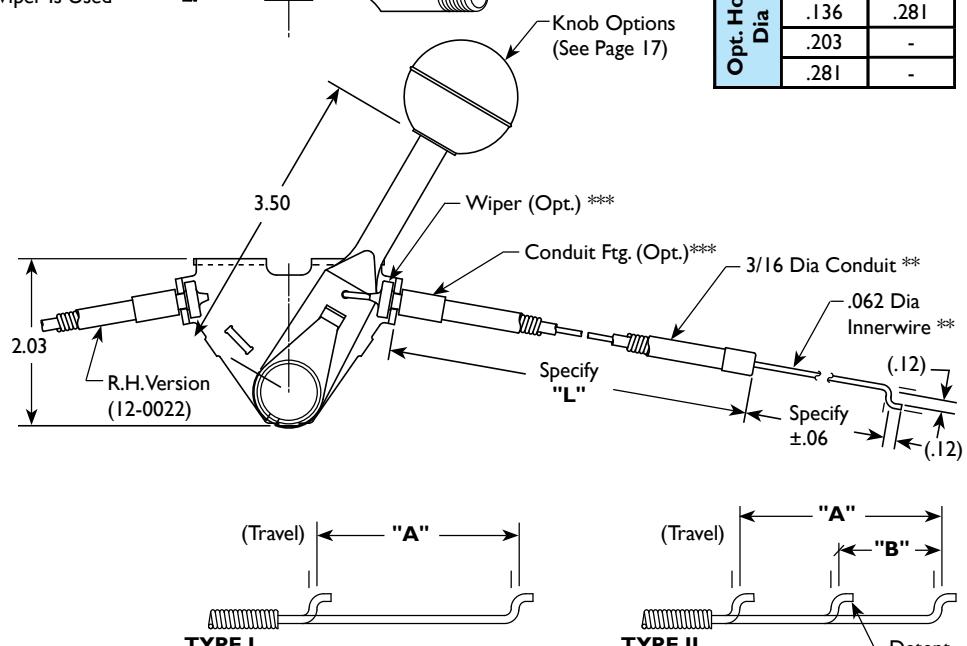
Hole Centers	
Opt. Hole Dia	
1.75*	1.87
.218*	.144
.136	.281
.203	-
.281	-

Standard Configuration

Part No.	Type	"A"	"B"
12-0321 L.S.S.	II	1.56	1.10
	II	1.56	.37
	I	1.56	-
12-0322 R.S.S.	II	1.56	.37
	II	1.56	1.10
	I	1.56	-



PANEL CUTOUT DETAIL
See Table I



TYPE II

12-0336 (L.S.S.) Shown/12-0346 (R.S.S.) Opposite

Panel Mount Control

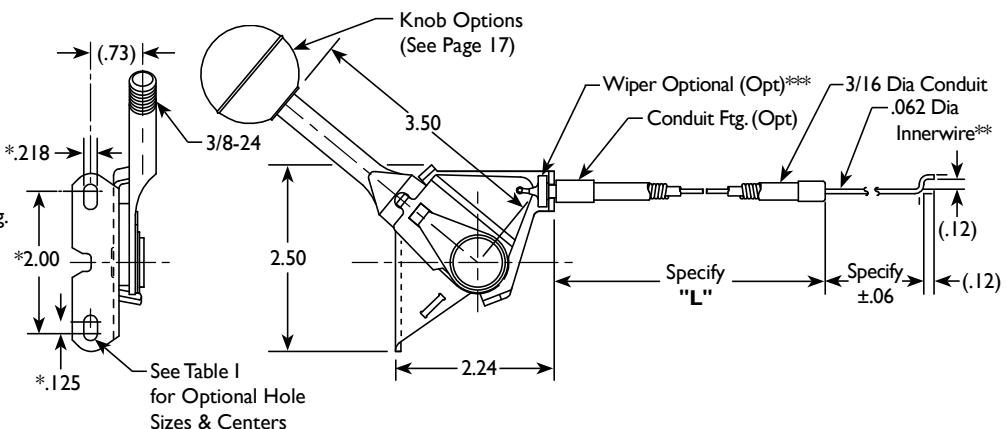
Materials: 3/8 Dia Lever
Bracket 14 Ga. (.074)

Finish: Plated for Corrosion Protection

* Standard Mounting Holes

** Material Options Available
(Galv. or S.S.)

*** .06 In Less Travel When Conduit Ftg.
& Wiper Is Used

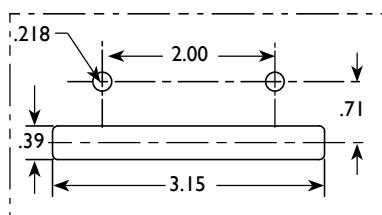


See Table I
for Optional Hole
Sizes & Centers

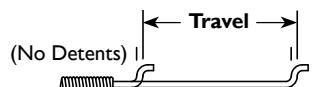
Table I

Optional Hole & Ctr.			
Opt. Hole Dia	2.00	1.87	1.75
.160	.144	.144	
.166	-	.281	
.203	-	-	
.281	-	-	

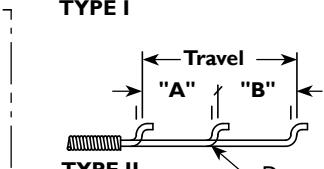
Part No.	Type	Hole Pattern	1.63 Travel			1.38 Travel		
			"A"	"B"	"C"	"A"	"B"	"C"
12-0336 L.S.S.	II	Std. Slot	.26	1.37	-	.21	1.17	-
	II	1.87 x .144	1.13	.50	-	.96	.43	-
	II	2.00 x .281	.26	1.37	-	.21	1.17	-
	I	Std. Slot	-	-	-	-	-	-
	III	Std. Slot	-	.87	.50	-	.75	.43
12-0346 R.S.S.	II	Std. Slot	.26	1.37	-	.21	1.17	-
	II	2.00 x .281	.26	1.37	-	.21	1.17	-
	I	Std. Slot	-	-	-	-	-	-
	III	Std. Slot	-	.87	.50	-	.75	.43



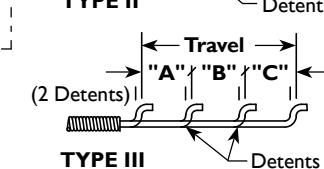
PANEL CUTOUT DETAIL
See Table I



TYPE I



TYPE II



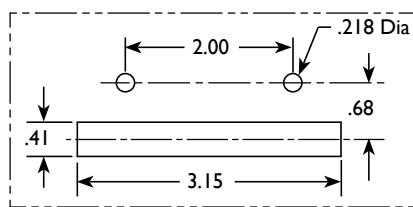
TYPE III

Positive Action Commercial Controls

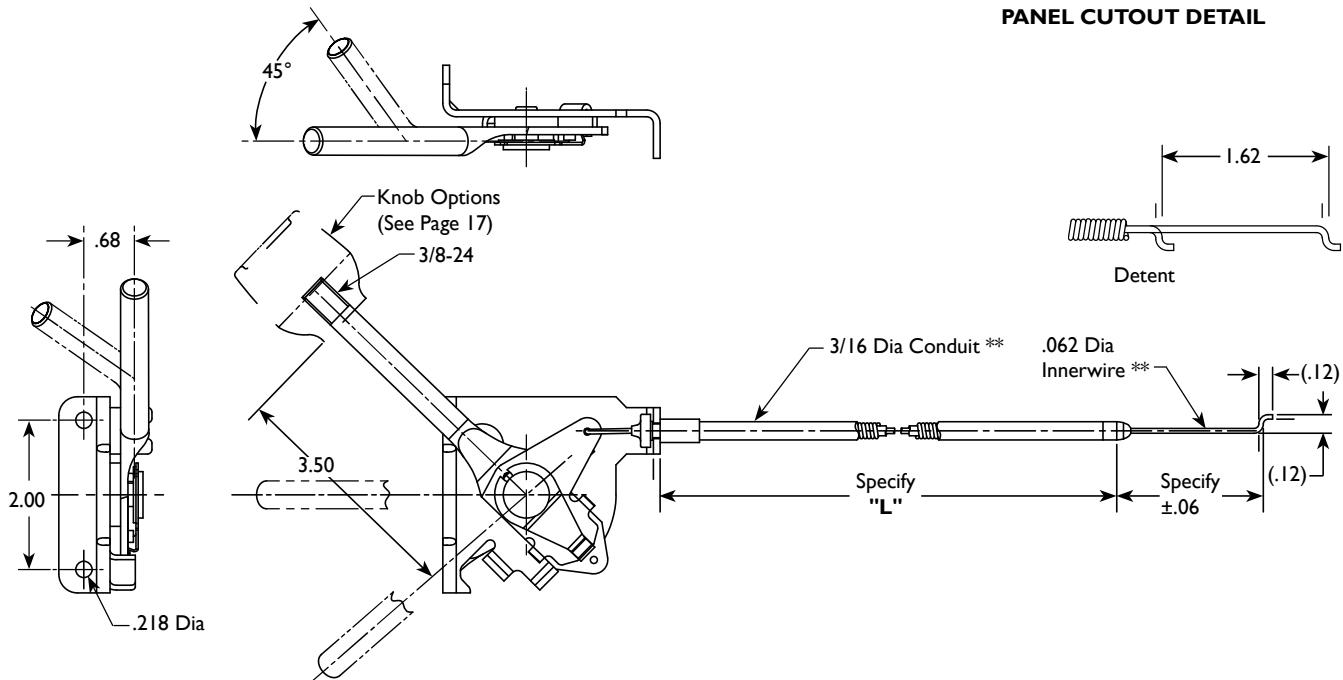
12-0336 (L.S.S.) Panel Mount Control

Materials: Lever 3/8 Dia Lever
Bracket 13 Ga. (.090)

Finish: Plated for Corrosion Protection
* Material Options Available (Galv. or S.S.)
** Lever may be bent at 45° (Specify)
Total Travel 1.62"



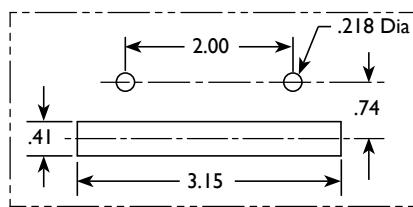
PANEL CUTOUT DETAIL



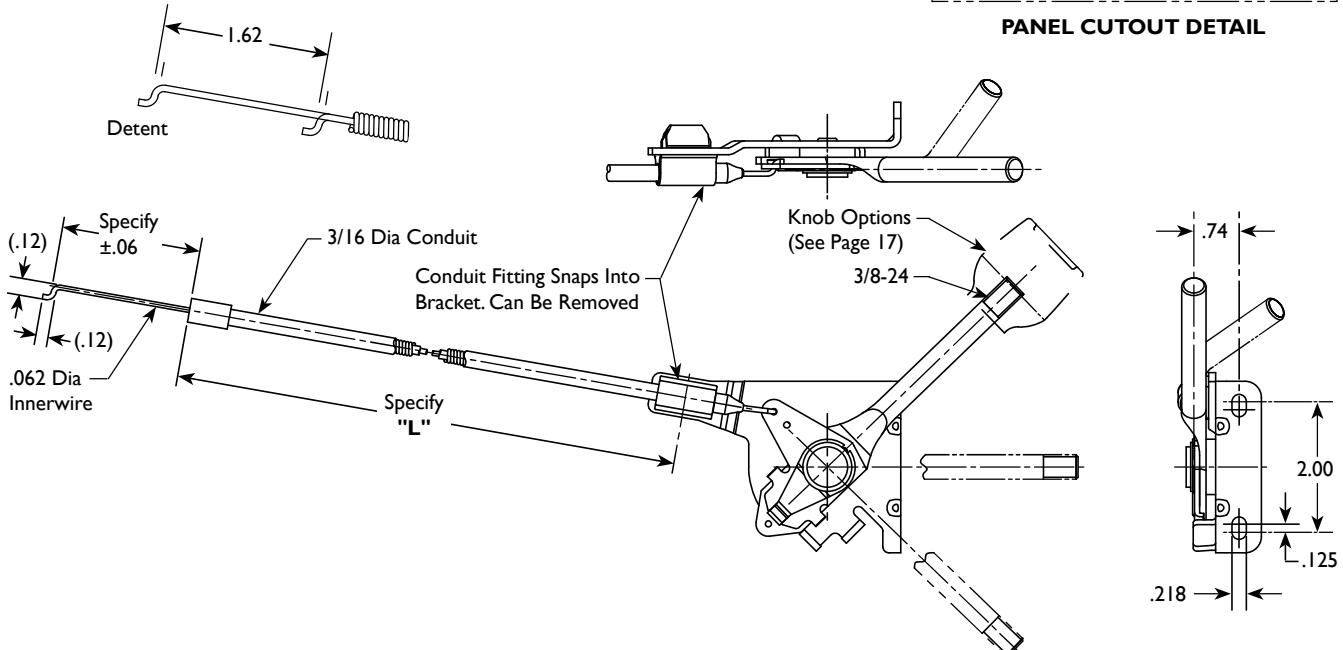
12-3046 (R.S.S.) Panel Mount Control (Removeable Conduit/Innerwire Feature)

Materials: Lever 3/8 Dia Lever
Bracket 13 Ga. (.090)

Finish: Plated for Corrosion Protection
* Material Options Available (Galv. or S.S.)
** Lever may be bent at 45° (Specify)



PANEL CUTOUT DETAIL



Heavy Duty Positive Action Friction Commercial Control

12-4001/12-4002 Panel Mount Control

L.H. Version Shown: 12-4001 Series

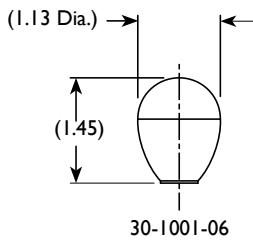
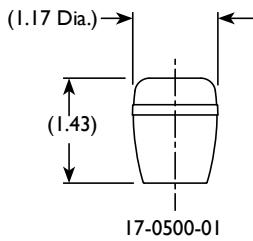
R.H. Version (Hidden): 12-4002 Series

Materials: Lever 3/8 dia.

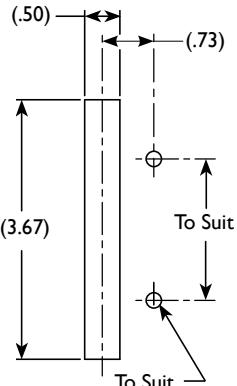
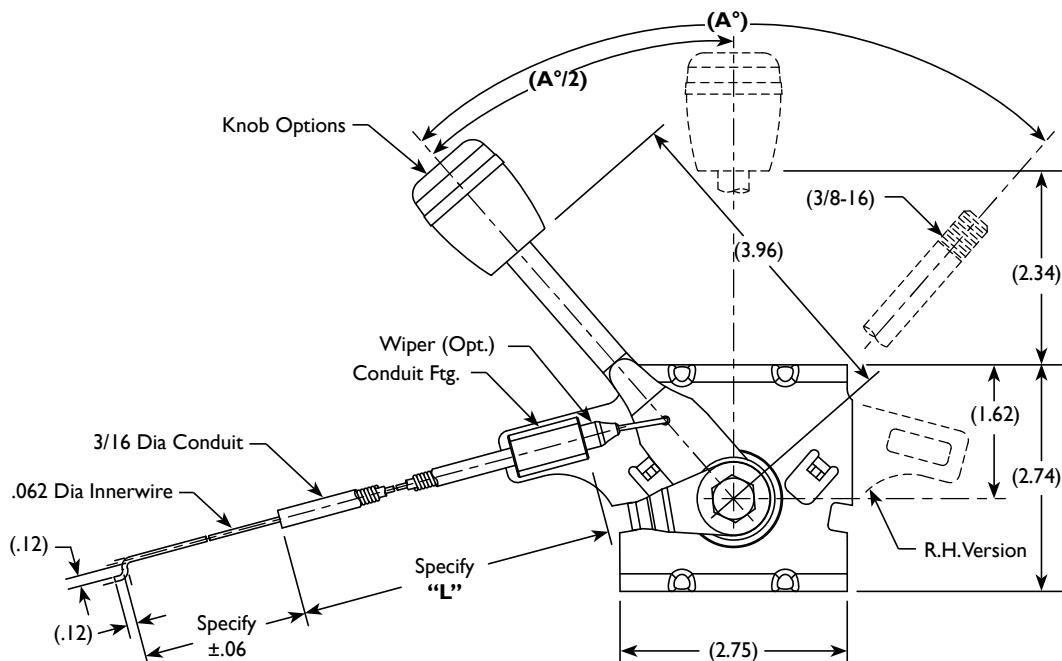
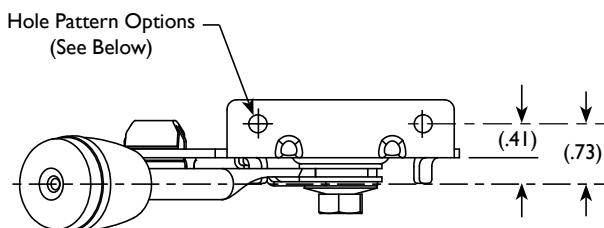
Bracket 12 Ga. (.10)

Finish: Plated for Corrosion Protection

Force @ Base of Knob: 10 lbs. (Force options available)

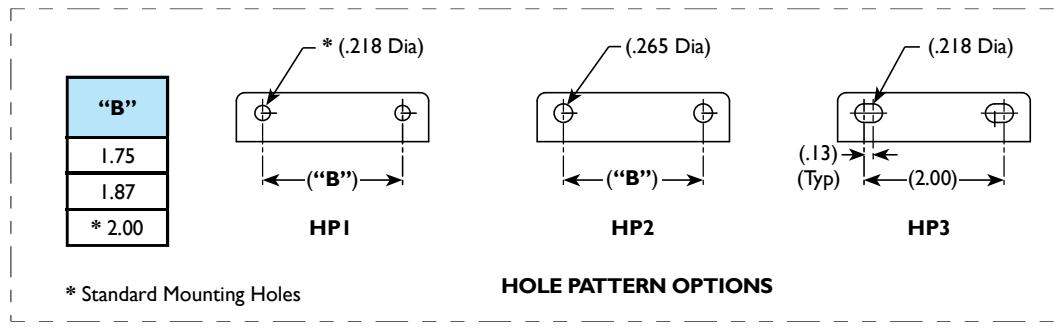


KNOB OPTIONS



PANEL CUTOUT

Innerwire Travel	Angle A°	Head Assy	Lever	L.H. Bkt.	R.H. Bkt.
1.75	82°	24-4001-01 (L.H.) / 24-4002-01 (R.H.)	27-4000-02 (Long)	28-4000-01	28-4000-02
1.62	82°	24-4001-02 (L.H.) / 24-4002-02 (R.H.)	27-4000-01 (Short)	28-4000-01	28-4000-02
1.32	61°	24-4001-03 (L.H.) / 24-4002-03 (R.H.)	27-4000-02 (Long)	28-4000-08	28-4000-09
1.25	61°	24-4001-04 (L.H.) / 24-4002-04 (R.H.)	27-4000-01 (Short)	28-4000-08	28-4000-09
.97	44°	24-4001-05 (L.H.) / 24-4002-05 (R.H.)	27-4000-02 (Long)	28-4000-13	28-4000-14
.91	44°	24-4001-06 (L.H.) / 24-4002-06 (R.H.)	27-4000-01 (Short)	28-4000-13	28-4000-14



HOLE PATTERN OPTIONS

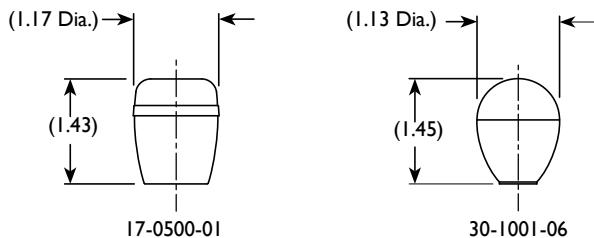
Heavy Duty Negative Action Friction Commercial Control

12-4003/12-4004 Panel Mount Control

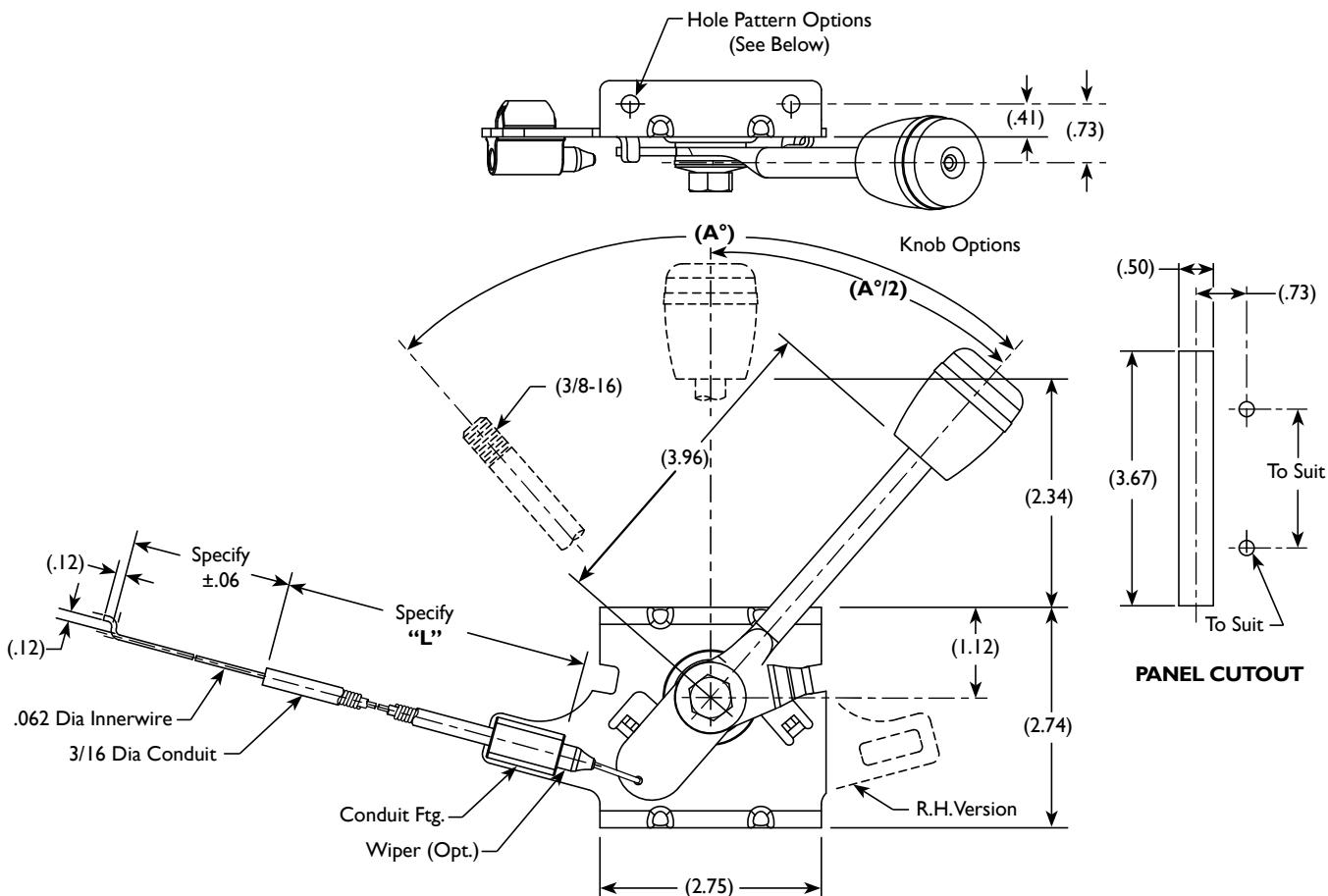
L.H. Version Shown: 12-4003 Series
R.H. Version (Hidden): 12-4004 Series

Materials: Lever 3/8 dia.
Bracket 12 Ga. (.10)

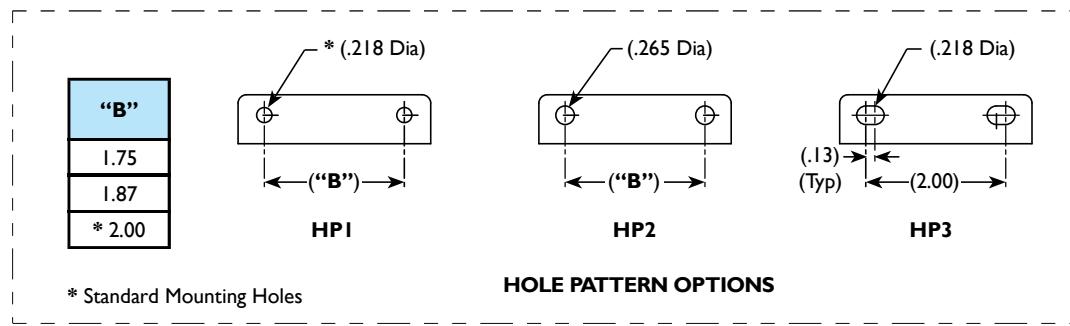
Finish: Plated for Corrosion Protection
Force @ Base of Knob: 10 lbs. (Force options available)



KNOB OPTIONS



Innerwire Travel	Angle A°	Head Assy	Lever	R.H. Bkt.	L.H. Bkt.
1.75	82°	24-4003-01 (L.H.) / 24-4004-01 (R.H.)	27-4000-06 (Long)	28-4000-01	28-4000-02
1.62	82°	24-4003-02 (L.H.) / 24-4004-02 (R.H.)	27-4000-05 (Short)	28-4000-01	28-4000-02
1.32	61°	24-4003-03 (L.H.) / 24-4004-03 (R.H.)	27-4000-06 (Long)	28-4000-08	28-4000-09
1.25	61°	24-4003-04 (L.H.) / 24-4004-04 (R.H.)	27-4000-05 (Short)	28-4000-08	28-4000-09
.97	44°	24-4003-05 (L.H.) / 24-4004-05 (R.H.)	27-4000-06 (Long)	28-4000-13	28-4000-14
.91	44°	24-4003-06 (L.H.) / 24-4004-06 (R.H.)	27-4000-05 (Short)	28-4000-13	28-4000-14



Heavy Duty Positive Action Detent Commercial Control

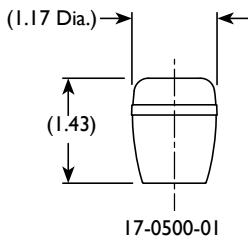
I2-4005/I2-4006 Panel Mount Control

L.H.Version Shown: 12-4005 Series

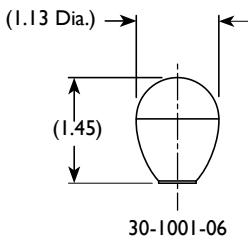
R.H.Version (Hidden): 12-4006 Series

Materials: Lever 3/8 dia.
Bracket 12 Ga. (.10)

Finish: Plated for Corrosion Protection
Force @ Base of Knob: 10 lbs. (Force options available)

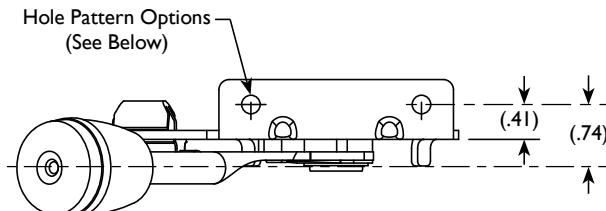


17-0500-01

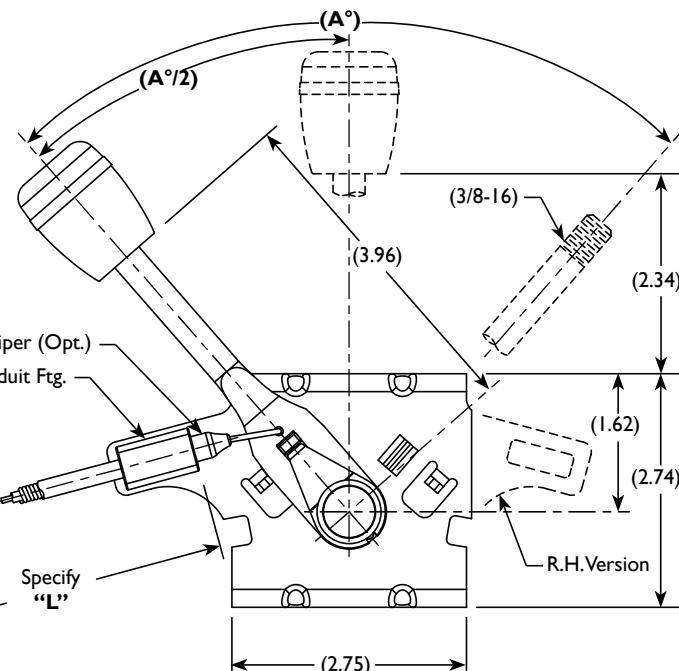


30-1001-06

KNOB OPTIONS

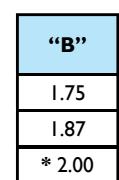


Knob Options

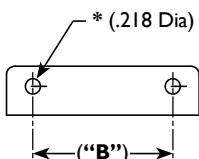


PANEL CUTOUT

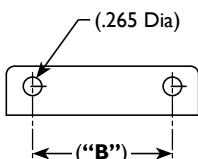
Innerwire Travel	Angle A°	Head Assy	Lever	L.H. Bkt.	R.H. Bkt.	Detent at Fully Extended
1.75	82°	24-4005-01 (L.H.) / 24-4006-01 (R.H.)	27-4000-04 (Long)	28-4000-03	28-4000-04	41°
1.62	82°	24-4005-02 (L.H.) / 24-4006-02 (R.H.)	27-4000-03 (Short)	28-4000-03	28-4000-04	41°
1.32	61°	24-4005-03 (L.H.) / 24-4006-03 (R.H.)	27-4000-04 (Long)	28-4000-10	28-4000-11	30.5°
1.25	61°	24-4005-04 (L.H.) / 24-4006-04 (R.H.)	27-4000-03 (Short)	28-4000-10	28-4000-11	30.5°
.97	44°	24-4005-05 (L.H.) / 24-4006-05(R.H.)	27-4000-04 (Long)	28-4000-15	28-4000-16	22°
.91	44°	24-4005-06 (L.H.) / 24-4006-06 (R.H.)	27-4000-03 (Short)	28-4000-15	28-4000-16	22°



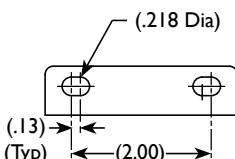
HP



HP



HP2



HP3

* Standard Mounting Holes

HOLE PATTERN OPTIONS

Heavy Duty Negative Action Detent Commercial Control

12-4007/12-4008 Panel Mount Control

L.H. Version Shown: 12-4007 Series

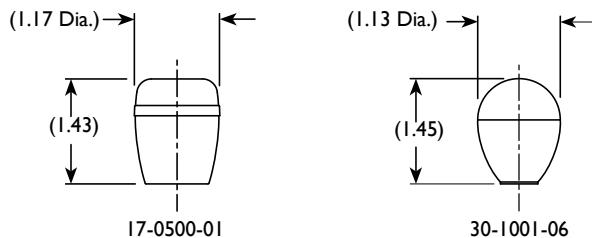
R.H. Version (Hidden): 12-4008 Series

Materials: Lever 3/8 dia.

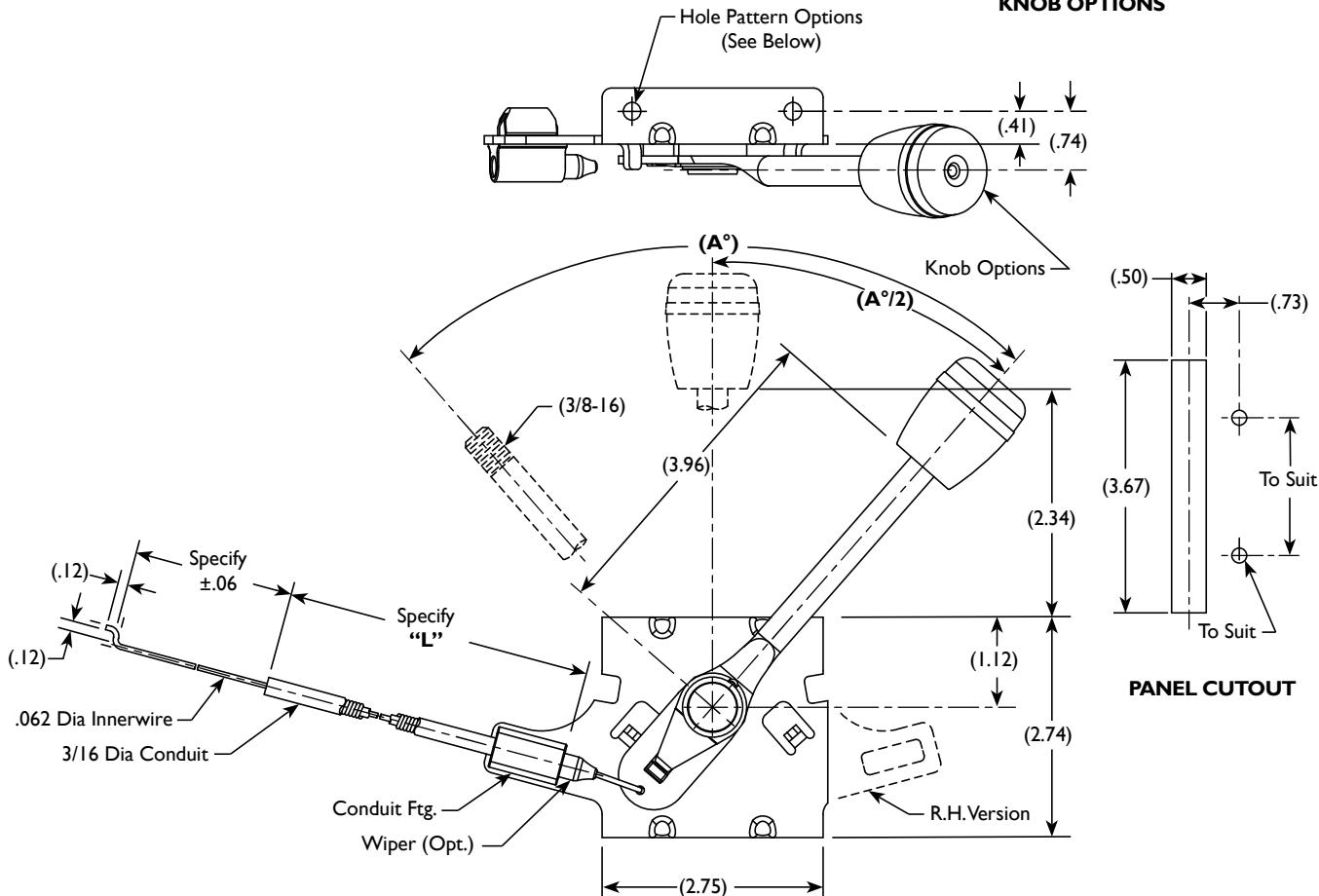
Bracket 12 Ga. (.10)

Finish: Plated for Corrosion Protection

Force @ Base of Knob: 10 lbs. (Force options available)

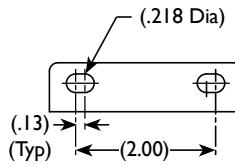
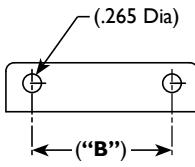
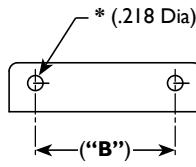


KNOB OPTIONS



Innerwire Travel	Angle A°	Head Assy	Lever	R.H. Bkt.	L.H. Bkt.	Detent at Fully Extended
1.75	82°	24-4007-01 (L.H.) / 24-4008-01 (R.H.)	27-4000-08 (Long)	28-4000-03	28-4000-04	41°
1.62	82°	24-4007-02 (L.H.) / 24-4008-02 (R.H.)	27-4000-07 (Short)	28-4000-03	28-4000-04	41°
1.32	61°	24-4007-03 (L.H.) / 24-4008-03 (R.H.)	27-4000-08 (Long)	28-4000-10	28-4000-11	30.5°
1.25	61°	24-4007-04 (L.H.) / 24-4008-04 (R.H.)	27-4000-07 (Short)	28-4000-10	28-4000-11	30.5°
.97	44°	24-4007-05 (L.H.) / 24-4008-05 (R.H.)	27-4000-08 (Long)	28-4000-15	28-4000-16	22°
.91	44°	24-4007-06 (L.H.) / 24-4008-06 (R.H.)	27-4000-07 (Short)	28-4000-15	28-4000-16	22°

"B"
1.75
1.87
* 2.00



* Standard Mounting Holes

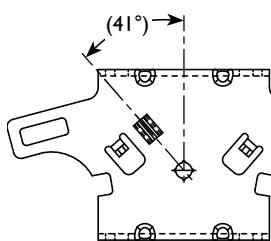
HOLE PATTERN OPTIONS

Heavy Duty Commercial Control Detent Options

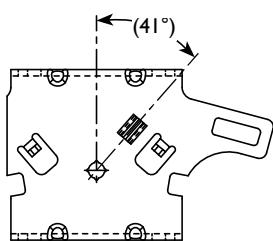
12-4005/12-4006 Panel Mount Control

POSITIVE ACTION

L.H. Version: 12-4005 Series
R.H. Version: 12-4006 Series



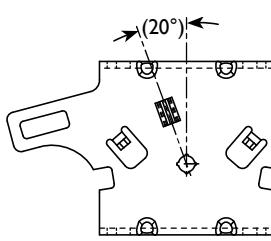
L.H. Bracket 28-4000-03



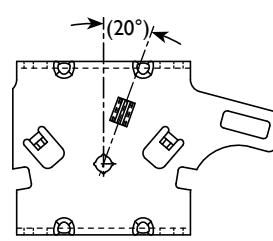
R.H. Bracket 28-4000-04

Detent

Travel 1.62 Short
Travel 1.75 Long



L.H. Bracket 28-4000-05



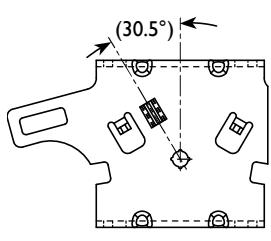
R.H. Bracket 28-4000-06

Detent

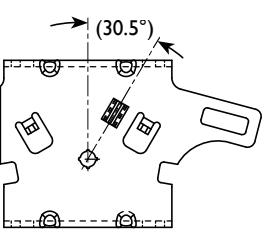
Travel 1.62 Short
Travel 1.75 Long

Detent

Detent 1.25 Short
Detent 1.38 Long



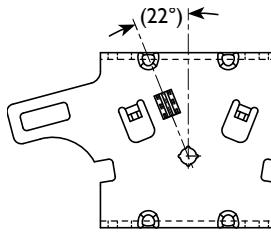
L.H. Bracket 28-4000-10



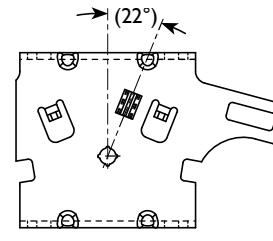
R.H. Bracket 28-4000-11

Detent

Travel 1.25 Short
Travel 1.32 Long



L.H. Bracket 28-4000-15



R.H. Bracket 28-4000-16

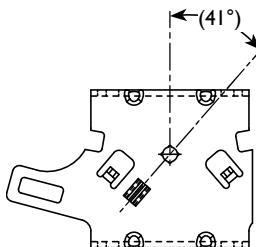
Detent

Travel .91 Short
Travel .97 Long

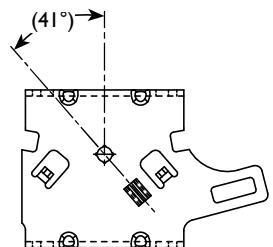
12-4007/12-4008 Panel Mount Control

NEGATIVE ACTION

L.H. Version: 12-4007 Series
R.H. Version: 12-4008 Series



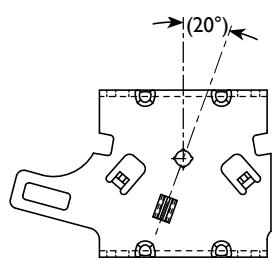
L.H. Bracket 28-4000-04



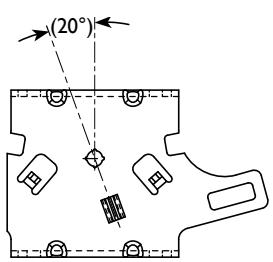
R.H. Bracket 28-4000-03

Detent

Travel 1.62 Short
Travel 1.75 Long



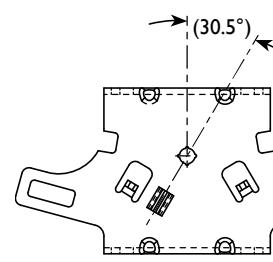
L.H. Bracket 28-4000-06



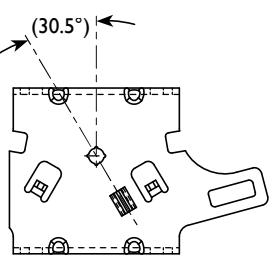
R.H. Bracket 28-4000-05

Detent

Travel 1.62 Short
Travel 1.75 Long



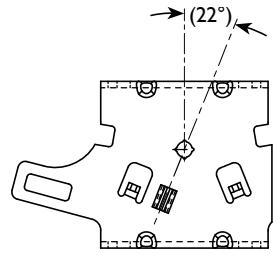
L.H. Bracket 28-4000-11



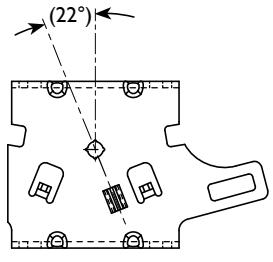
R.H. Bracket 28-4000-10

Detent

Travel 1.25 Short
Travel 1.32 Long



L.H. Bracket 28-4000-16



R.H. Bracket 28-4000-15

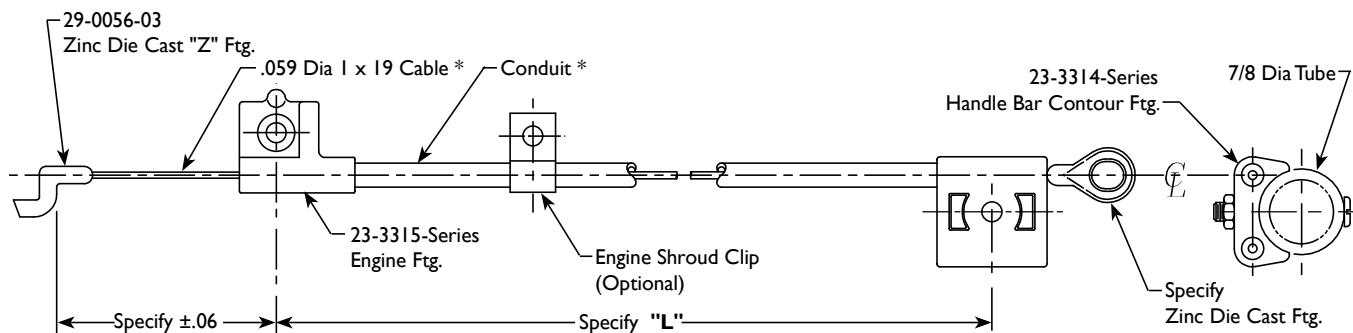
Detent

Travel .91 Short
Travel .97 Long

Manual Zone Restart (MZR) Controls

Handlebar Mounted Conduit Fitting

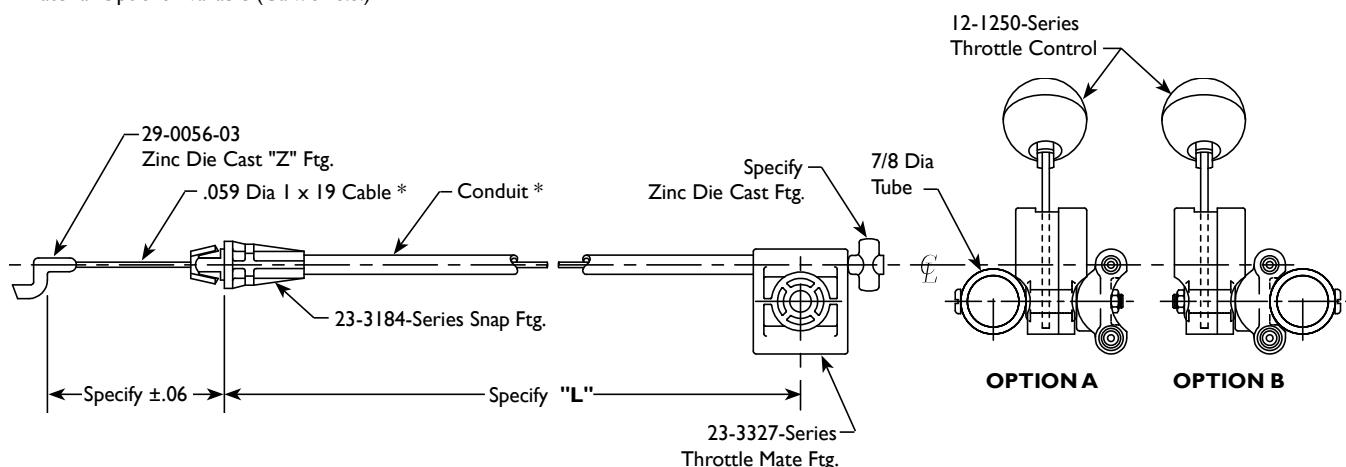
* Material Options Available (Galv. or S.S.)



NOTE: For detailed description of conduit and fitting options see Light Duty Tension Cable Controls Catalog.

Throttle Mated Fitting for 12-1250 Throttle Control (see page 16)

* Material Options Available (Galv. or S.S.)

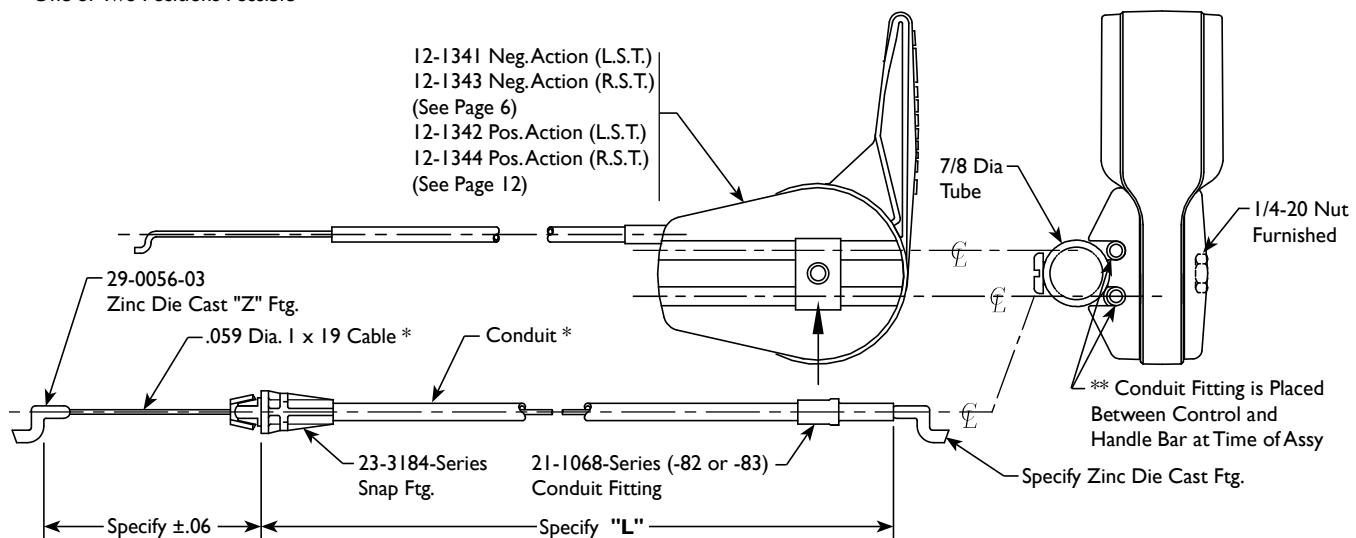


NOTE: For detailed description of conduit and fitting options see Light Duty Tension Cable Controls Catalog.

Throttle Mated Fitting for 12-1340 Throttle Control (see page 7)

* Material Options Available (Galv. or S.S.)

** One or Two Positions Possible



NOTE: For detailed description of conduit and fitting options see Light Duty Tension Cable Controls Catalog.

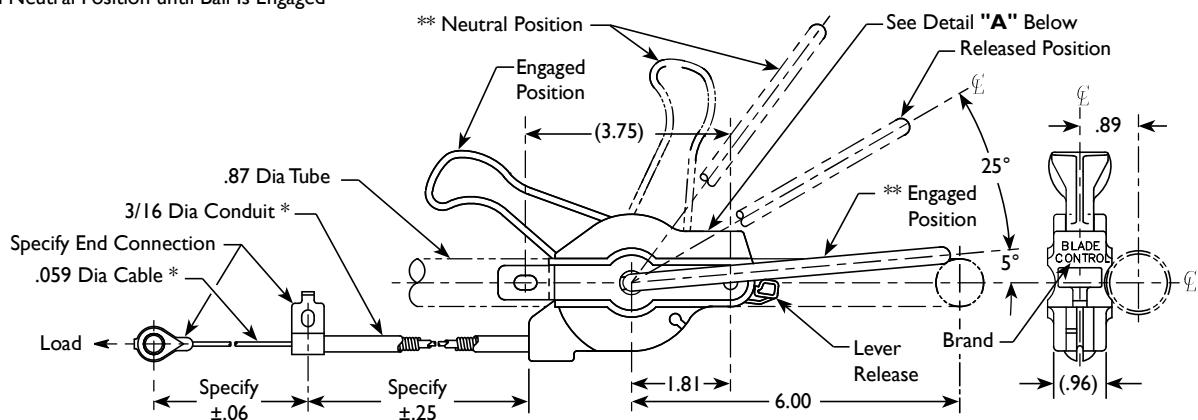
Blade Brake Clutch (BBC) Controls

12-1293 Radial Control

(5° Bail Angle)

* Material Options Available (Galv. or S.S.)

** Lever Locks in Neutral Position until Bail Is Engaged



NOTES:

1. Min. Travel: .25 In; Max Travel: 1.50 In

Min. Load: 5 Lbs; Max Load: 50 Lbs

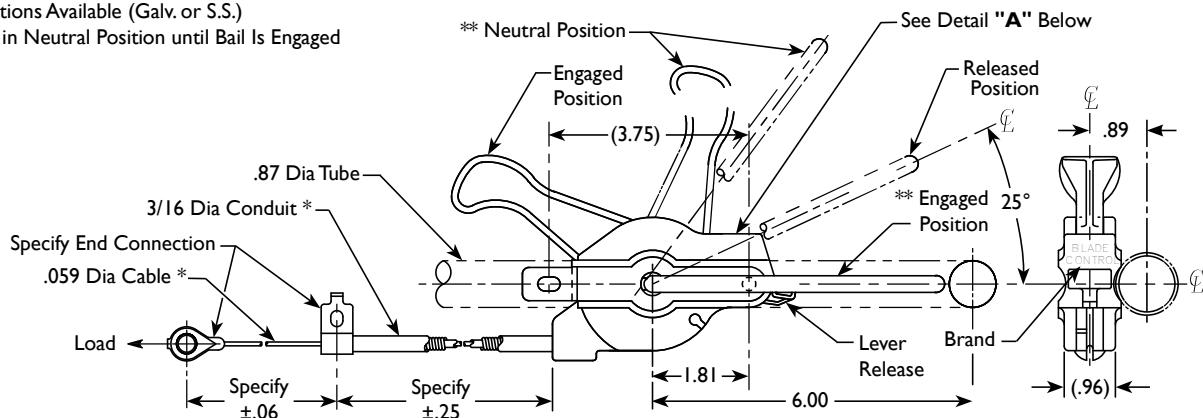
2. For detailed description of conduit and fitting options see Light Duty Tension Cable Controls Catalog.

12-1294 Radial Control

(0° Bail Angle)

* Material Options Available (Galv. or S.S.)

** Lever Locks in Neutral Position until Bail Is Engaged



NOTES:

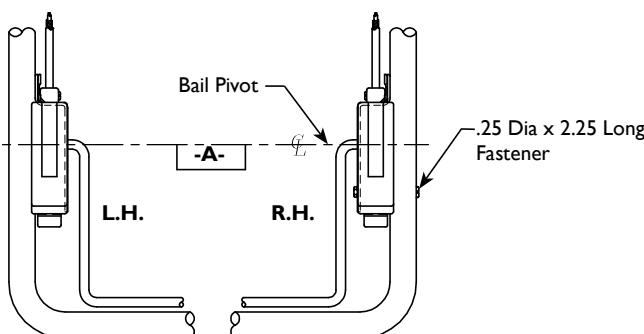
1. Min. Travel: .25 Max Travel: 1.50

Min. Load: 5 Lbs Max Load: 50 Lbs

2. For detailed description of conduit and fitting options see Light Duty Tension Cable Controls Catalog.

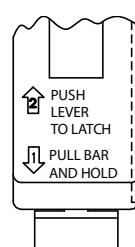
Installation Data

**Control May Be Mounted
on Left or Right Side**

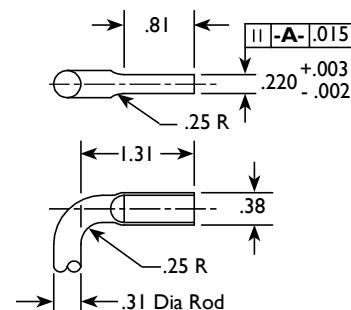


SPECIFY

- Cable: Galv. or S.S.
- Conduit: "I8 Wire" or "Lined Bowden"
- Conduit Routing: Approximate Routing in Degrees
- Load: Requirement at Extension End
- Travel: Requirement at Extension End
- Conduit & Cable Assembly Is Shipped Separate from Control Head Unless Otherwise Stated



DETAIL "A"
(White)



Blade Brake Clutch (BBC) Controls

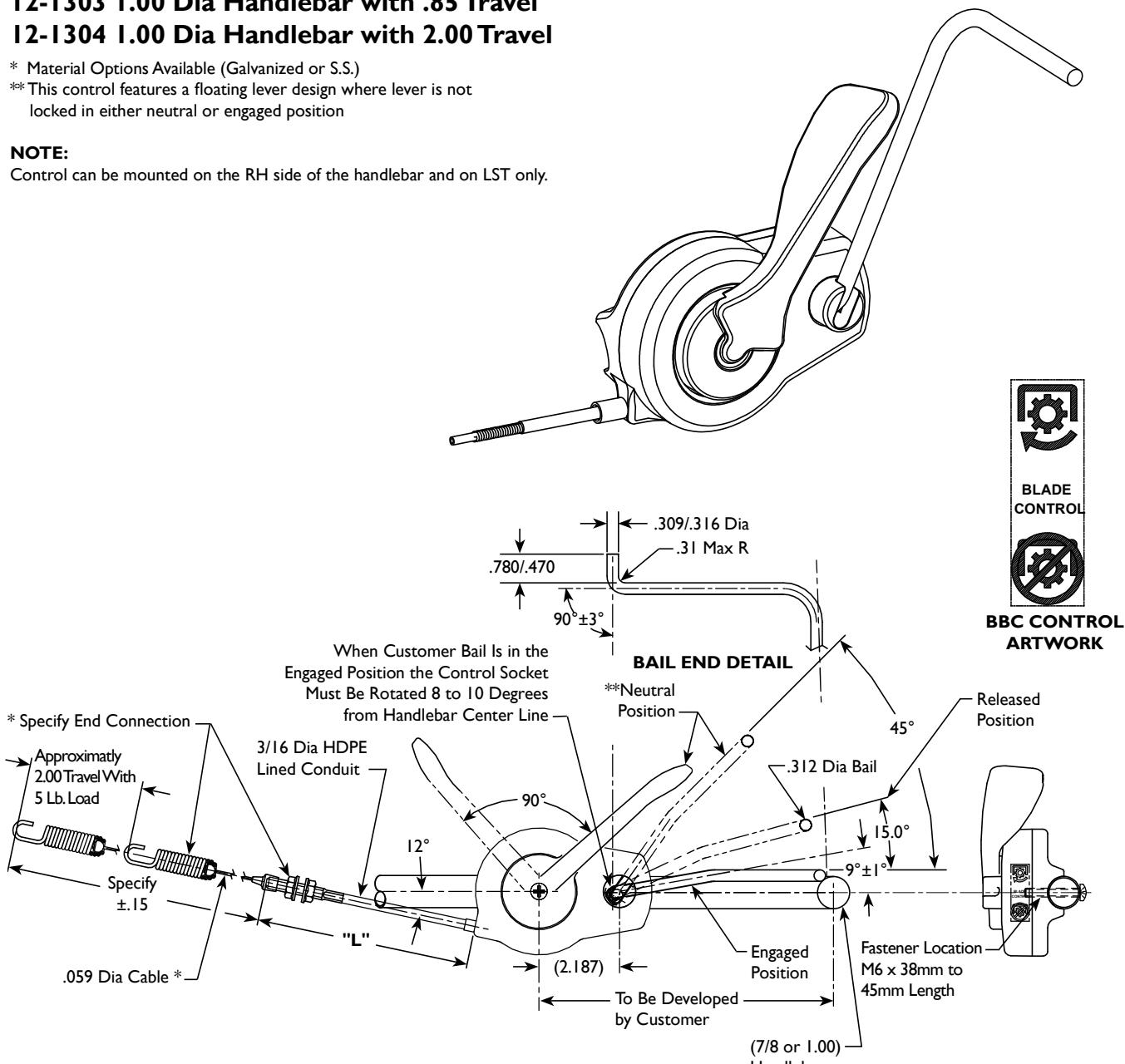
- I2-1301 7/8 Dia Handlebar with .85 Travel**
I2-1302 7/8 Dia Handlebar with 2.00 Travel
I2-1303 1.00 Dia Handlebar with .85 Travel
I2-1304 1.00 Dia Handlebar with 2.00 Travel

* Material Options Available (Galvanized or S.S.)

** This control features a floating lever design where lever is not locked in either neutral or engaged position

NOTE:

Control can be mounted on the RH side of the handlebar and on LST only.



CUSTOMER TO SPECIFY

- Conduit Length
- Core Extension Length
- Conduit End Connection
- Core End Connection
- Type of Blade Brake Clutch

NOTES:

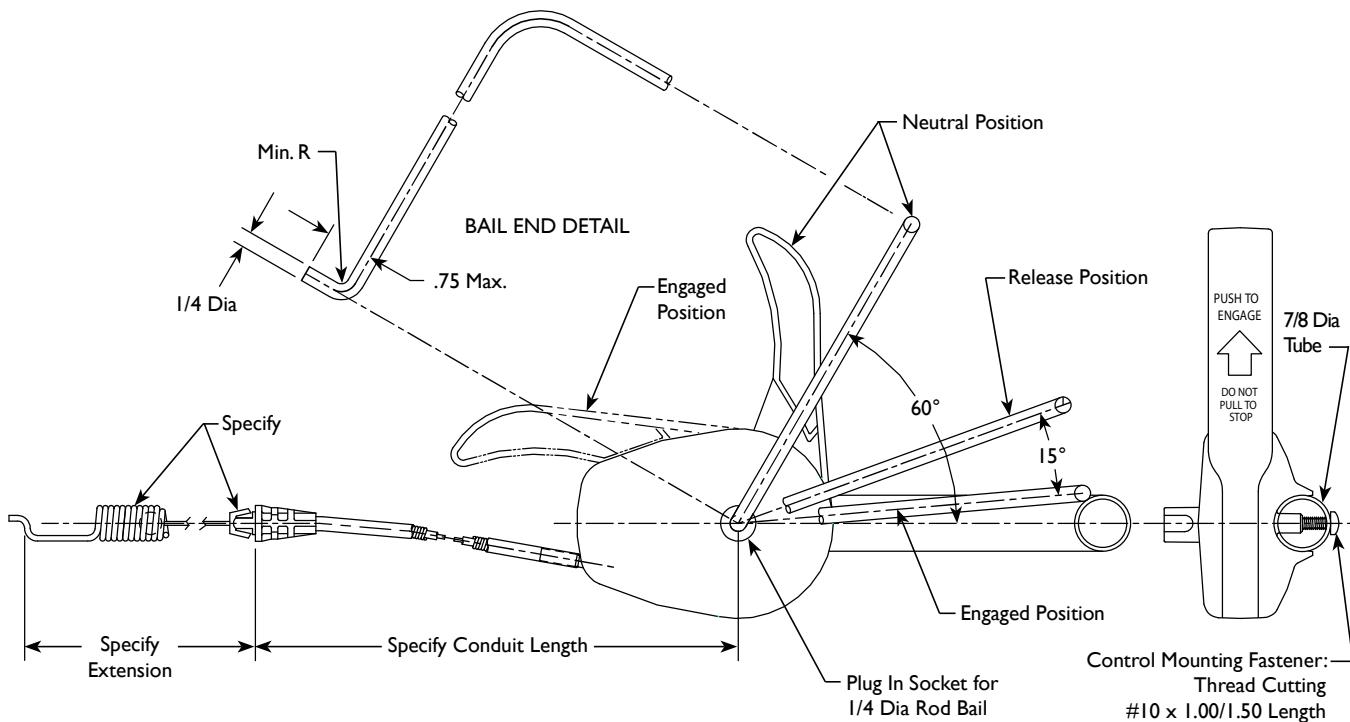
1. The spring provided to operate the Warner Electric BBC should be deflected .16" (4mm) minimum in the clutched position at positive stop.
2. Spring Data
 Free Length: 2.00
 Rate: 145 Lbs per Inch
 Initial Tension: 16 Lbs
3. For detailed description of conduit and fitting options, see Light Duty Tension Cable Controls Catalog.

Ground Drive Controls

12-1362 Series Control

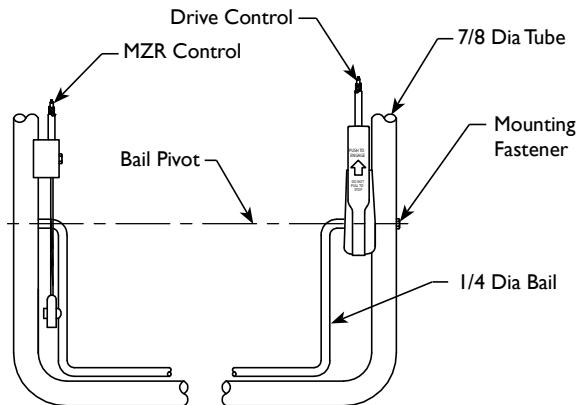
This 12-1362 Ground Drive Control is designed for easy installation on a 7/8 dia handlebar with one #10 fastener. The control mounts on the right hand side of handlebar and L.S.T. and allows the manufacturer to provide a single bail system that controls both MZR and Ground Drive applications.

Rotation of the operator control bail to the engaged position releases the engine brake and allows engine start. Activation of the ground drive system requires only a push of the lever. A slight release of the bail will disengage the drive and allow the engine to continue running.



CUSTOMER TO SPECIFY

- Conduit Length
- Core Extension Length
- Conduit Type, High Temp or Standard HDPE
- Core Type, Galv.or S.S. Cable
- Core End Fitting
- Conduit End Fitting



SINGLE BAIL SYSTEM
INSTALLATION DATA

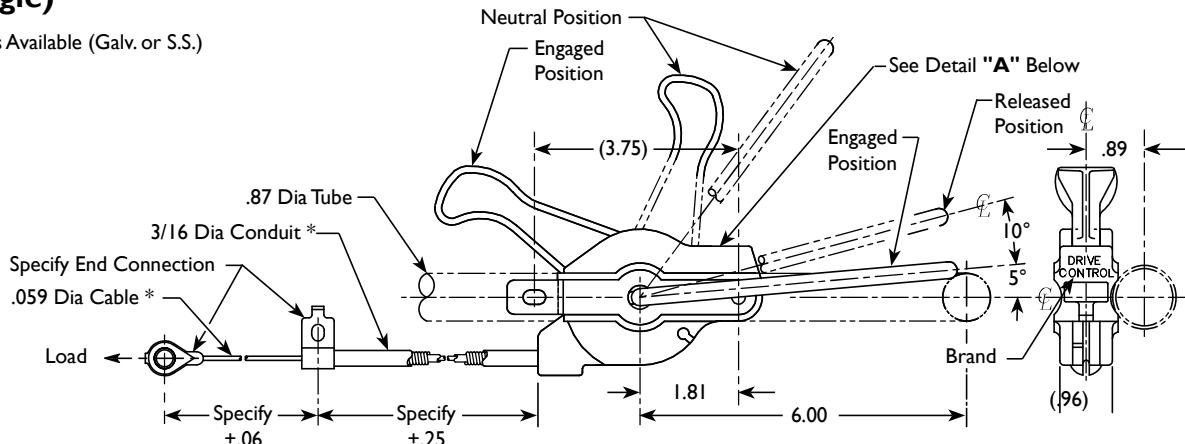
NOTES:

1. Min. travel: .25.
2. Max. travel: 1.65.
3. Control mounts on 7/8 Dia Handlebar.
4. Single fastener mounting.
5. Control lever rotates 80° to engage.
6. Control bail rotates 55° to engage.
7. Max load: 50 Lbs.
8. For detailed description of conduit and fitting options, see Light Duty Tension Cable Controls Catalog.

Ground Drive Controls

12-1291 Radial Control (5° Bail Angle)

* Material Options Available (Galv. or S.S.)

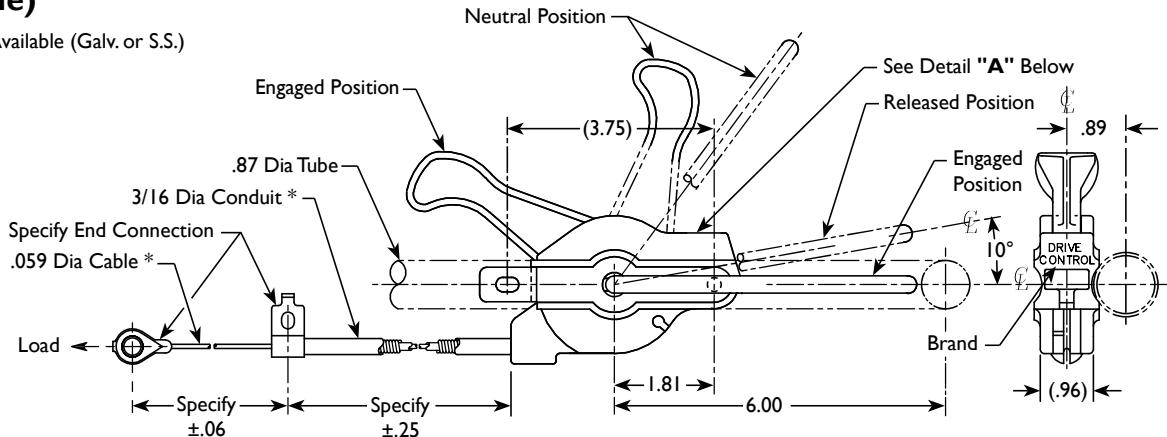


NOTES:

1. Min. Travel: .25 Max Travel: 1.50
Min. Load: 5 Lbs Max Load: 50 Lbs
2. For detailed description of conduit and fitting options see Light Duty Tension Cable Controls Catalog.

12-1292 Radial Control (0° Bail Angle)

* Material Options Available (Galv. or S.S.)

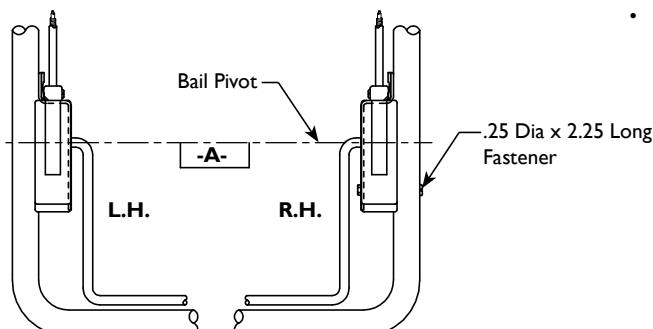


NOTES:

1. Min. Travel: .25 Max Travel: 1.50
Min. Load: 5 Lbs Max Load: 50 Lbs
2. For detailed description of conduit and fitting options see Light Duty Tension Cable Controls Catalog.

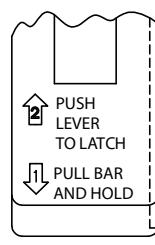
Installation Data

Control May Be Mounted on Left or Right Side

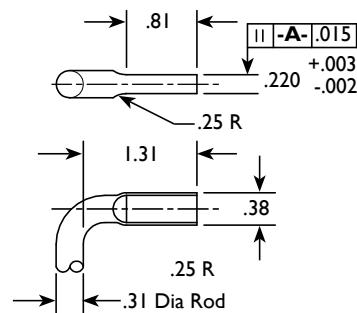


SPECIFY

- Cable: Galv. or S.S.
- Conduit: "18 Wire" Or "Lined Bowden"
- Conduit Routing: Approximate Routing in Degrees
- Load: Requirement at Extension End
- Travel: Requirement at Extension End
- Conduit & Cable Assembly Are Shipped Separate Unless Otherwise Stated



DETAIL "A"
(White)



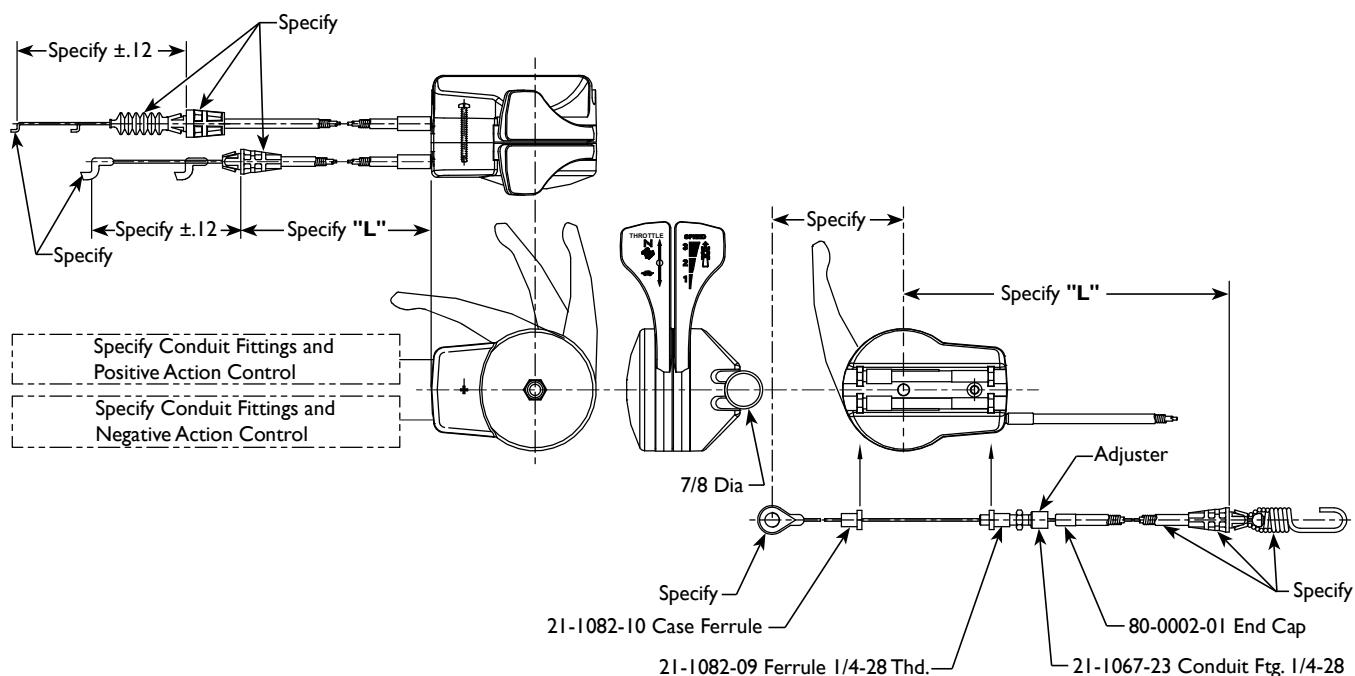
Multifunction Lever Control

12-1352 Dual Control

This Dual lever control is designed for easy installation on a 7/8 dia handlebar with one 6mm fastener. Each independent lever can be used to control many applications requiring up to 1.56 (39.6mm) core travel such as engine throttle or transmission shift. Cable for tension, or innerwire for push-pull applications, can be specified. Each lever in the dual control may be specified as positive or negative action operation (see page 4). Lever detents or non-detented friction systems can be provided by the use of metal detent plates protected within the tough plastic control body.

Please contact your Wescon application engineer for your special applications.

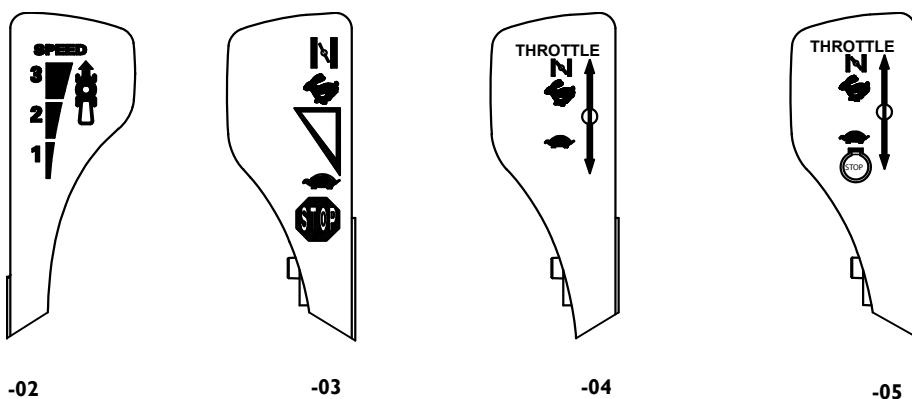
A Drive cable and/or MZR cable control may be installed by the customer between the handlebar and body of the control head.



NOTE: For detailed description of conduit and fitting options see Light Duty Tension Cable Controls Catalog.

32-3309 -* Brand Options for 12-1352 & 12-1353 Controls

* Insert Dash No.



Muntifunction Lever Controls

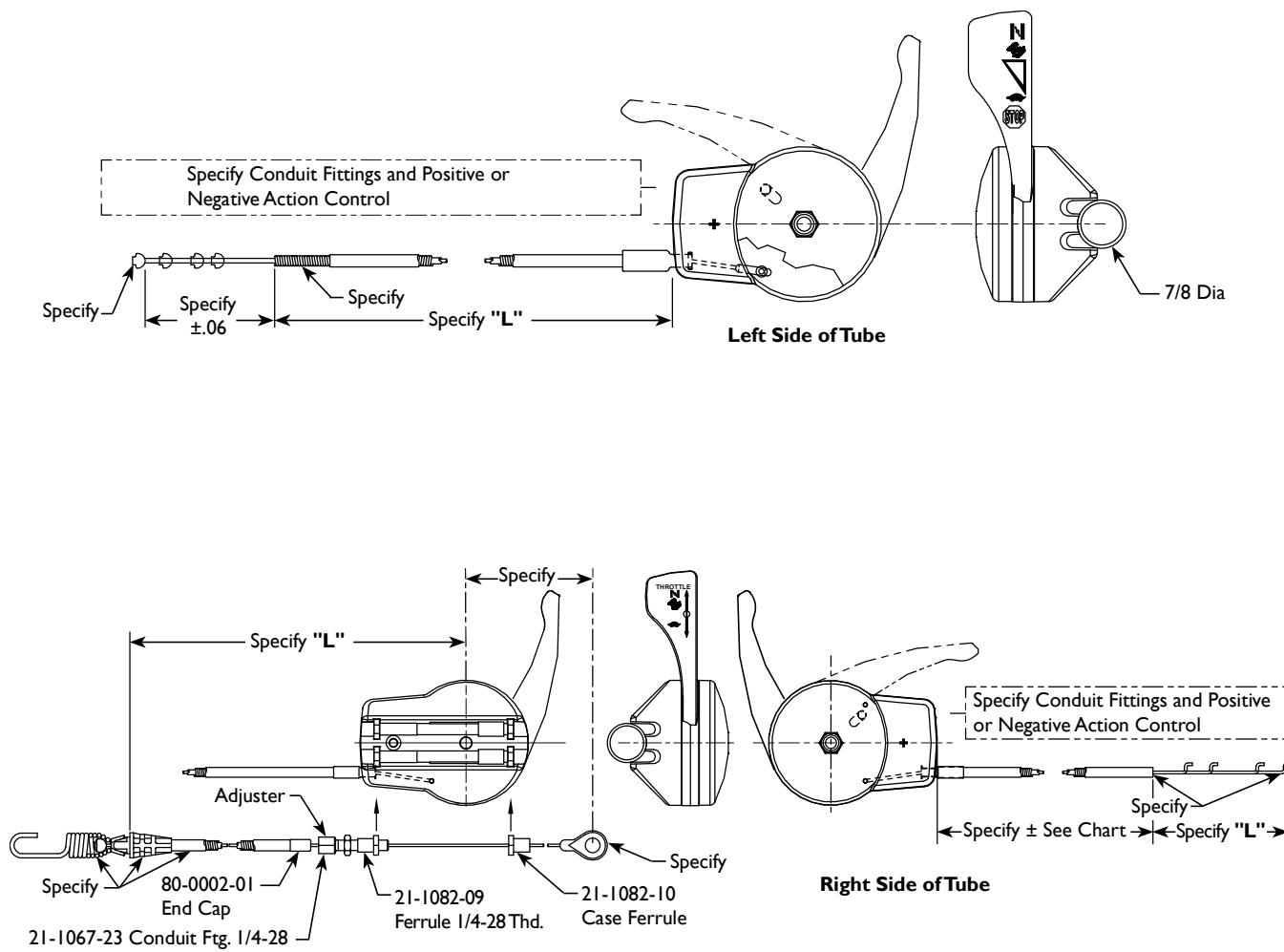
12-1353 Single Lever Control

This Single Lever control is designed for easy installation on a 7/8 dia handlebar with one 6mm fastener. The lever can be used to control many applications requiring up to 1.56 (39.6 mm) core travel such as engine throttle or transmission shift. Cable for tension, or innerwire for push-pull applications can be specified. This control may be specified as positive or negative action operation (see page 4). Lever detents or non-detented friction systems can be provided by the use of a metal detent plate that is protected within the tough plastic control body.

Please contact your Wescon application engineer for your special applications.

A Drive cable and/or MZR cable control may be installed by the customer between the handlebar and body of the control head.

In-line adjustments are available for the external drive control.



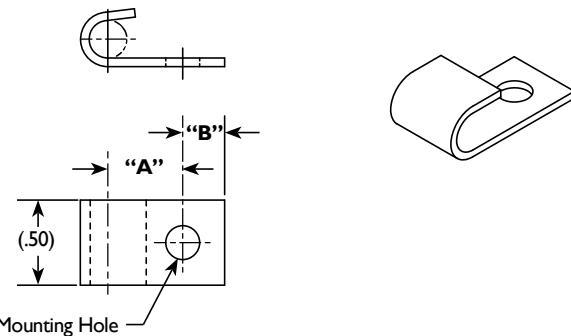
NOTE: For detailed description of conduit and fitting options see Light Duty Tension Cable Controls Catalog.

Conduit Clips

22-2152-* Conduit Clip

*Insert Dash No.

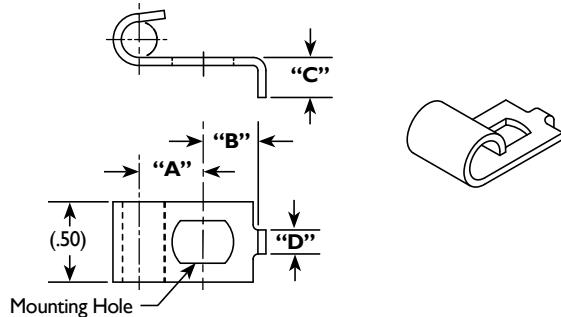
Part No.	Conduit Size	Mounting Hole	"A"	"B"	Finish
-01	3/16 Cov. or 7/32 Bare	.200 Dia Hole	.44	.25	Bright
-05	3/16 Cov. or 7/32 Bare	.263 Dia Hole	.56	.25	Bright
-24	3/16 Cov. or 7/32 Bare	No Hole	.56	.25	Bright
-31	3/16 Cov. or 7/32 Bare	.27 x .39 Slot	.37	.32	Yellow



22-2152-* Conduit Clip - Anti-Rotational

*Insert Dash No.

Part No.	Conduit Size	Mounting Hole	"A"	"B"	"C"	"D"	Finish
-15	3/16 Cov. or 7/32 Bare	.21 x .34 Slot	.41	.34	.25	.15	Bright
-18	3/16 Cov. or 7/32 Bare	.21 x .34 Slot	.41	.34	.25	.15	Yellow
-40	7/32 Cov. or 1/4 Bare	.19 x .26 Slot	.43	.357	.19	.205	Yellow
-41	.312 Covered	.26 Dia Hole	.53	.33	.25	.18	Yellow



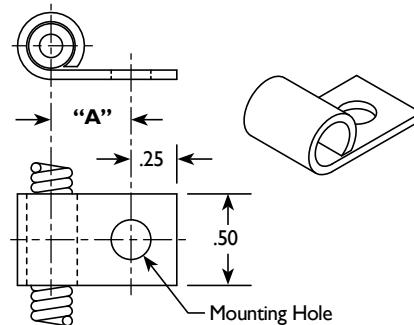
22-2152-* Loose String-On Clip

*Insert Dash No.

Usage: 3/16 Dia Covered, 7/32 Bare Conduit & 6 Wire

Finish: Black

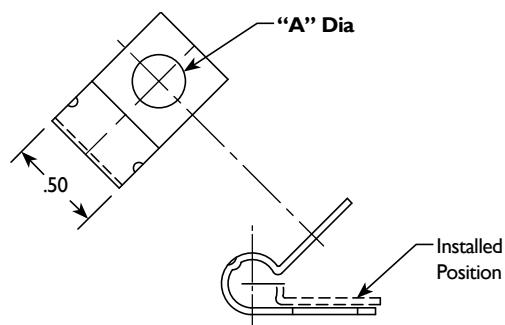
Part No.	Mounting Hole	"A"
-03	.218 Dia Hole	.62
-43	.27 x .27 Slot	.78



22-2115-* Conduit Clip

*Insert Dash No.

Part No.	Conduit Size	"A"	Finish
-02	7/32 Bare	.28	Clear
-03	1/4 Bare	.28	Clear
-04	3/16 Bare	.28	Clear

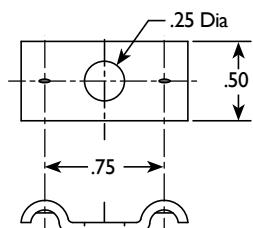


22-0183-00 Dual Conduit Clamp

Material: Steel

Finish: Zinc Plate

Usage: 3/16 or 7/32 Dia Conduit

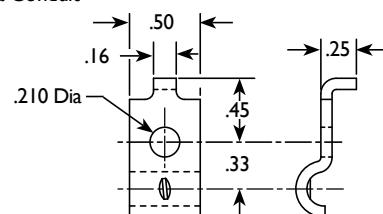


22-2054-00 Single Conduit Clamp

Material: Steel

Finish: Zinc Cobalt

Usage: 3/16 or 7/32 Dia Conduit

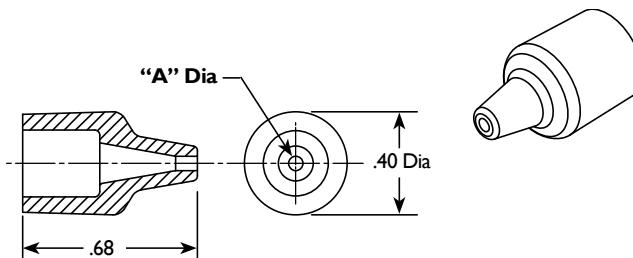


Seals & Wipers

23-3210-* Cable Seal

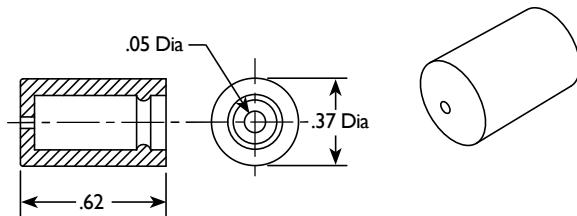
* Insert Dash No.

Dash No.	Cable Size	"A"	Color
-01	3/64 & 1/16	.056	Black
-02	3/32	.084	Black
-03	5/64	.076	Black
-04	3/32 & 1/16	.056	Grey



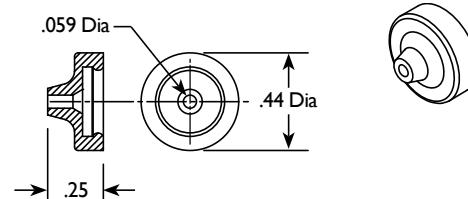
23-3107-01 Grommet

For .062 Dia Solid Wire, 7/32 Dia Covered or 1/4 Dia Bare Conduit



23-3109-01 Grommet

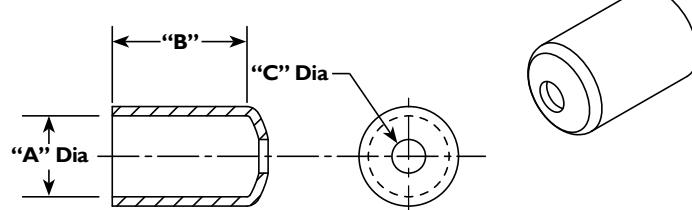
For .062 Dia Cable w/21-1060-18 Fitting



80-3112* Boot

* Insert Dash No.

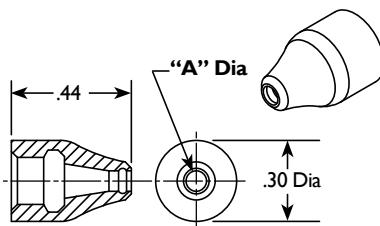
Dash No.	"A"	"B"	"C"	Color
-00	.375	5/8	5/32	Black
-01	.281	1/2	3/32	Red
-02	.343	1/2	3/32	Black
-03	.281	1/2	1/16	Black
-04	.343	1/2	.200	Black
-05	.375	3/8	.155	Red



23-3243-* Seal

* Insert Dash No.

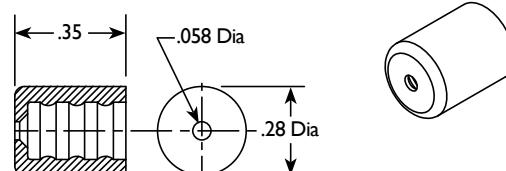
Dash No.	"A"	Color
-01	.076	Grey
-02	.056	Black
-03	.092	Black



23-3041-00

For 3/16 Bare Conduit

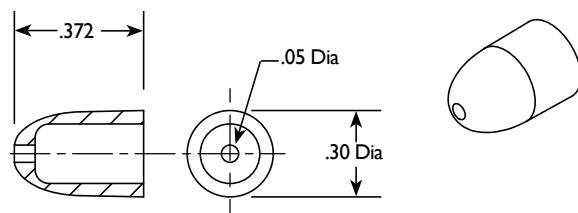
Used in Temperatures Up to 300° F Applications



23-3040-* Grommet

* Insert Dash No.

Dash No.	Conduit	Color
-00-01	3/16 Cov. or 7/32 Bare	Black
-01-04	.187 Bare	Grey



Innerwire

Bulk Innerwire

Size Dia.	Type	Part No.	Bulk Part No. (100 Ft. Rolls)
.062	* Type 302 S.S. Spring Wire	503062-01	598062
	Galvanized M.B. Spring Wire	511062-00	597062
.072	Brass or Copperized M.B. Spring Wire	501072-00	596072
	* Type 302 S.S. Spring Wire	503072-00	598072
	* Type 302 S.S. Spring Wire (S.I.C.**)	503072-02	-
	Galvanized M.B. Spring Wire	511072-00	597072

* Per ASTM A-313

** Straighten in Coil

Innerwire End Bends

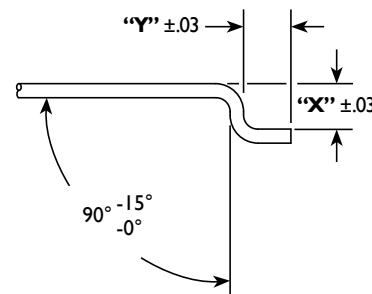
“Z” Bend

Standard Bend Configuration - Will be furnished unless otherwise specified.

Bend No.	“X”	“Y”
00-0122	.125	.125
00-0125	.125	.313
00-0126	.125	.375
00-0127	.125	.437
00-0128	.125	.500
00-0129	.156	.125
00-0131	.156	.250
00-0132	.156	.313
00-0133	.156	.375
00-0134	.156	.437

Bend No.	“X”	“Y”
00-0135	.156	.500
00-0136	.188	.125
00-0138	.188	.250
00-0139	.188	.313
00-0140	.188	.375
00-0141	.188	.437
00-0142	.188	.500
00-0143	.219	.125
00-0144	.219	.188
00-0145	.219	.313

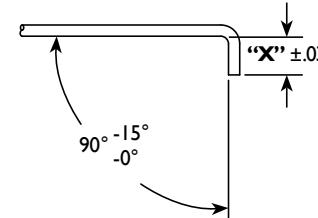
Bend No.	“X”	“Y”
00-0146	.219	.313
00-0147	.219	.375
00-0148	.219	.437
00-0149	.219	.500
00-0152	.250	.250
00-0163	.125	.062
00-0164	.125	.219
00-0166	.188	.219
00-0167	.135	.214
00-0168	.250	.125



“L” Bend

Bend No.	“X”
00-0303	.250
00-0304	.312
00-0305	.375
00-0306	.437
00-0307	.500
00-0308	.562

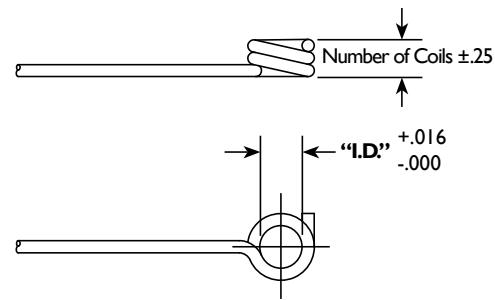
Bend No.	“X”
00-0309	.625
00-0311	.750
00-0313	.875
00-0315	1.00
00-0319	1.25
00-0321	1.50



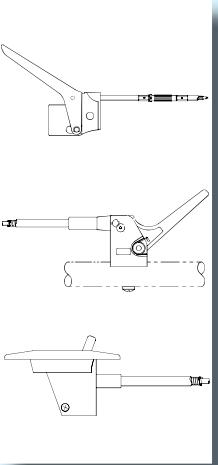
Centered Loop

Bend No.	I.D.	Number of Coils
00-3101	.250	1 1/2
00-3102	.250	3
00-3103	.192	3
00-3104	.261	3
00-3106	.192	2

Bend No.	I.D.	Number of Coils
00-3111	.192	1 3/4
00-3115	.265	2
00-3119	.109	4
00-3120	.314	1 1/2
00-3121	.192	1 1/2



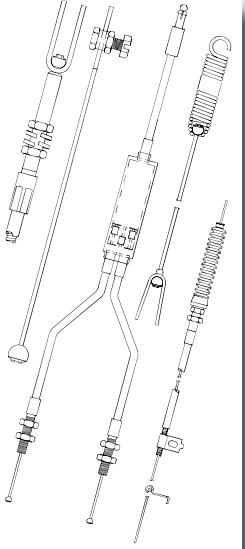
TAKE A LOOK AT OTHER WESCON PRODUCTS



WESCON
CONTROLS

Controls for a world in motion

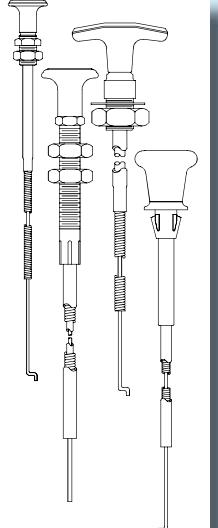
Light Duty Lever Controls



WESCON
CONTROLS

Controls for a world in motion

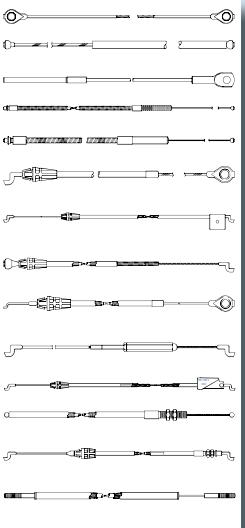
Accessories



WESCON
CONTROLS

Controls for a world in motion

**Light Duty Push-Pull
and
Turn-to-Lock Controls**



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**Light Duty
Tension Cable
Controls**



Controls for a world in motion

WESCON CONTROLS, LLC

2533 S. West Wichita, Kansas 67217

316-942-7266 or call toll free 1-800-835-0160

Fax 316-942-5114

www.wesconcontrols.com

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