# VAL-AN 900 SERIES

### VERSATILE RACKMOUNT AND INSTRUMENT CASES

- Shock mounted or hard mounted configurations.
- Choice of EMI shielded or environmentally-protected panels
- Front and rear access through removable covers.
- 7 basic styles, in panel heights from 5.25" to 17.50".
- 19" panel width, with standard EIA hole pattern.
- Waterproof construction.
- Meets applicable requirements of MIL-STD-108, MIL-STD-810, and MIL-PRF-28800.

This versatile line of rugged aluminum cases have been thoughtfully engineered to satisfy the growing need for rackmounted electronics in the field. They are ideal for the safe transportation and field operation of delicate electronic instruments, and offer a host of practical user benefits.

They feature an internal chassis, which is either hard mounted or shock mounted within the center section of the case. Installation or rack mounted equipment is quick and easy, with total accessibility from the front and rear. In transit or storage, instrument panels are thoroughly protected by covers which are latched to the case.

The cases are designed to be stacked, allowing users to set up a "cabinet" type system in the field. Specially designed T-type latches on the front cover permit accessibility to instruments and contents in the stacked mode; virtual impossibility in cases using traditional latch systems.

These cases feature recessed handles, waterproof construction with pressure relief valve, and optional EMI shielding or environmental protection.

They are available in 13 standard configurations, in panel heights from 5.25" to 17.50", and depths from 12.00" to 22.00". Front or rear covers may be optionally equipped with inner lids for storage.





Stacking Latch



Top: T-Latch Bottom: Scrow Latch



Grounding Strap Included in Every Cases with Frame



www.zerocases.com Call 800-959-5050 or 801-298-5900

# VAL-AN 900 SERIES

### HOW TO CHOOSE A RACKMOUNT

MODEL	DESCRIPTION	HARD MOUNT	SHOCK MOUNT
900	Front Opening Case with Standard Spring-Loaded Latches.	V <sup>1</sup>	
905	Front Opening Case with 'R Handle Latches.	v'	
910	Double-Ended Opening Case with Standard Spring Latches.	v'	
915	Double-Ended Opening Case with 'T' Handle Latches on Front Cover & Standard Spring Latches on Rear Cover.	v'	
920	Front Opening Case with Standard Spring Latches on Cover. Available with Mil-T-28800 Optional Bumpers.	ν'	
925	Front Opening Case with 'R Handle Latches on Cover. Available with Mil-T-28800 Optional Bumpers.	ν'	
930	Double-Ended Opening Case with Standard Spring Latches on Covers. Options: Mil-T-28800 Bumpers & Sealed Panel.	ν'	
935	Double-Ended Case with Standard Spring and 'R Handle Latches on Covers. Options: Mil-T-28800 Bumpers & Sealed Panel.	ν'	
940	Front Opening Case with Standard Spring Latches on Cover.		v'
945	Front Opening Case with 'R Handle Latches on Cover.		v'
950	Double-Ended Opening Case with Standard Spring Latches on Covers. Options: EMI Shielded Rack.		v'
955	Double-Ended Opening Case with Standard Spring and 'T" Handle Latches on Covers. Options: EMI Shielded Rack.		ν'
960	Double-Ended Opening Case with 'T' Handle & Screw Latches on Covers. Optional Stacking Latches Available.		v'

#### STANDARD FINISH OPTIONS Finish, except latches, handle grip, hinges and valve.

POWDERCOAT PAINT

RECOMMENDED

BK-Black 27040

DB-Dark Blue 25102

DS-Desert Sand 20372

FG-Forest Green 24052

GR-Gray 26270

MB-Medium Blue 25190

NG-NATO Green RAL6014

OD-Olive Drab 24097

OR-Orange 21400

RD-Red 21105

WH-White 27925

YW–Yellow 23785

FED-STD-595 for reference.

RHINOLINING™

RB–Black RG–Gray MIL-SPEC FINISHES

A-No Finish.

B–Wash Prime per DOD-P-15328 and Epoxy Primer per MIL-PRF-23377, Type 1, Class

C2.

C–Same as B Plus Paint Light Gray Semi-Gloss Polyurethane Color #26307 of FED-STD-595.

D–Same as B Plus Paint Light Gray

Semi-Gloss Polyurethane Color #16307 of FED-STD-595.

E–Wash Prime per DOD-P-15328 and Epoxy Primer per MIL-DTL-53022, Type II, Paint Polyurethane Yellow Gloss Color #13538 of FED-STD-595.

F–Same as B Plus Paint Strata Blue Gloss Polyurethane Color #15045 of FED-STD-595.

G–Same as B Plus Paint Green Semi-Gloss Polyurethane Color #24300 of FED-STD-595. H–Same as B Plus Paint Olive Drab Semi-Gloss Polyurethane Color #24084 of FED-STD-595.

J–Same as B Plus Paint Olive Drab Lusterless Polyurethane Color #34088 of FED-STD-595.

K–Same as B Plus Paint Aliphatic Polyurethane Camouflage Coating (CARC) per MIL-DTL-53039, Type II, Color #383 Green, #34094 of FED-STD-595.

S-Special Order—Please Specify.

W-Chemical Film Per MIL-DTL-5541, Type I, Class 1A. Epoxy Primer per MIL-DTL-53022, Type II, or Water-base Epoxy Primer per MIL-DTL-53030, Type I. Paint with White Polyurethane Coating per MIL-PRF-85285, Type II, Class H, Color #17925 of FED-STD-595 or Epoxy Coating Per MIL-PRF-22750.

UA-Chem Film per MIL-DTL-5541, Type1, Class 1A.

#### **CUSTOMIZATION**

Any commercial or military specification can be met. ZERO can supply any color per FED-STD-595.

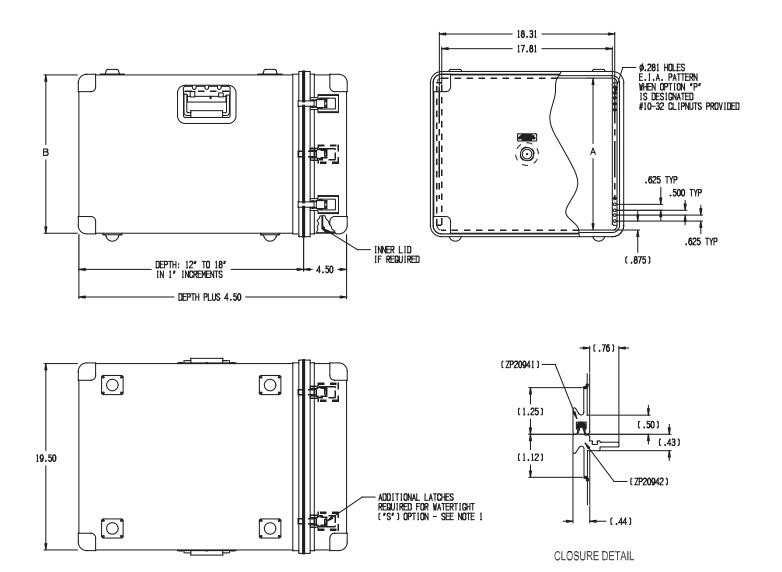
#### Panel Fabrication

- Silk Screen
- Engraving
- Custom Fabrication

#### Case Customization

- Stenciling
- Designation Printing
- Decals/Labels
- Silk Screen



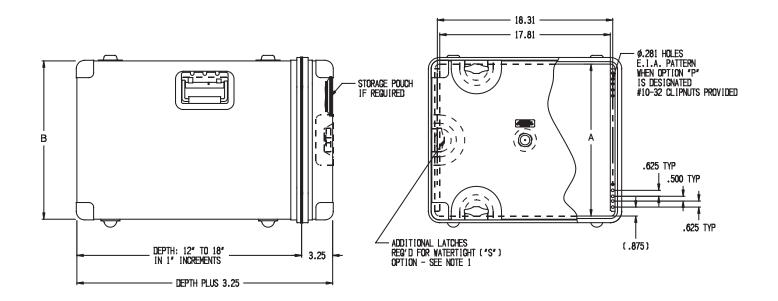


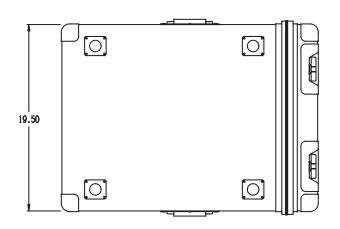
PART NUMBER	
900 🗆 🗆 🗆 🗆 🗆 🗆	
	1 = NON-RECESSED HANDLE 2 = RECESSED HANDLE
	A = AUTOMATIC VALVE M = MANUAL RELIEF VALVE N = NOT REQUIRED
	4 = NOT REQ'D 5 = INNER LID FOR COVER
	FINISH (see page 46 )
	DEPTH: IN 1" INCREMENTS 12" MIN TO 18" MAX
	C = CUSTOMER P = STANDARD (E.I.A.) N = NOT REQ'D
	PANEL HEIGHT
	D = DRIP PROOF PER MIL-\$TD-108 \$ = WATERTIGHT PER MIL-\$TD-108
	CASE SERIES

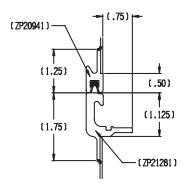
PANEL HEIGHT			
Dash No.	"A" Dim.	"U" Size	"B" Dim.
X	Special Size		
-5	5.25	(3U)	6.12
-7	7.00	(4U)	7.87
-8	8.75	(5U)	9.62
-10	10.50	(6U)	11.37
-14	14.00	(8U)	14.87
-17	17.50	(10U)	18.37
-21	21.00	(12U)	21.87
-24	24.50	(14U)	25.37
-28	28.00	(16U)	28.87

#### NOTES:

1. ADDITIONAL LATCHES REQUIRED FOR WATERTIGHT ("S") OPTION. PANEL HEIGHT DASH NO. 5 THRU 7 ADD: 4 LATCHES (6 TOTAL) PANEL HEIGHT DASH NO. 8 THRU 17 ADD: 4 LATCHES (8 TOTAL) PANEL HEIGHT DASH NO. 21 THRU 28 ADD: 6 LATCHES (10 TOTAL)





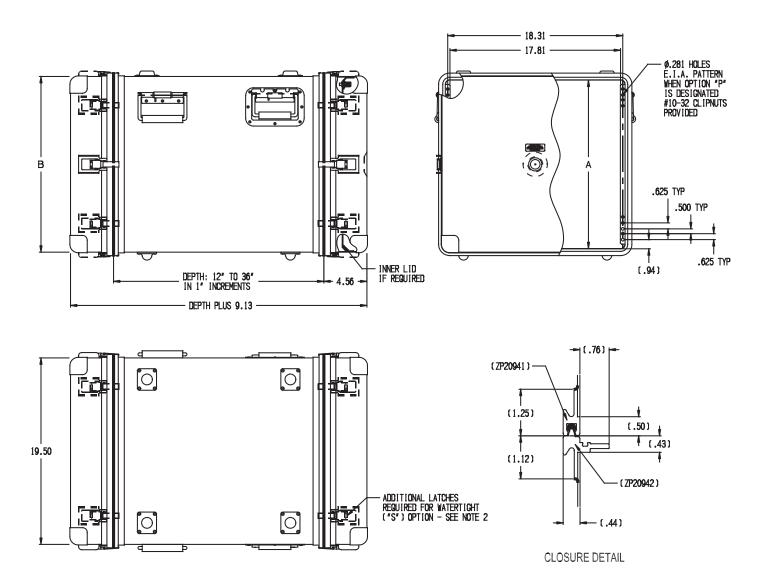


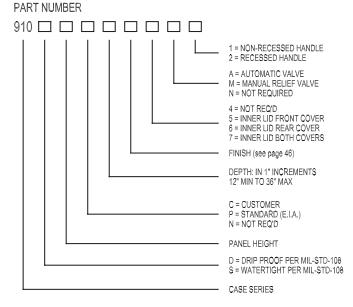
CLOSURE DETAIL

PART NUMBER	
905 🗆 🗆 🗆 🗆 🗆 🗆	
	1 = NON-RECESSED HANDLE 2 = RECESSED HANDLE
	A = AUTOMATIC VALVE M = MANUAL RELIEF VALVE N = NOT REQUIRED
	4 = NOT REQ'D 6 = POUCH
	FINISH (see page 46)
	DEPTH: IN 1" INCREMENTS 12" MIN TO 18" MAX
	C = CUSTOMER P = STANDARD (E.I.A.) N = NOT REQ'D
	PANEL HEIGHT
	D = DRIP PROOF PER MIL-\$TD-108 S = WATERTIGHT PER MIL-\$TD-108
	CASE SERIES

PANEL HEIGHT				
Dash No.	"A" Dim. "U" Size		"B" Dim.	
X	Special Size			
-7	7.00	(4U)	7.87	
-8	8.75	(5U)	9.62	
-10	10.50	(6U)	11.37	
-14	14.00	(8U)	14.87	
-17	17.50	(10U)	18.37	
-21	21.00	(12U)	21.87	
-24	24.50	(14U)	25.37	
-28	28.00	(16U)	28.87	

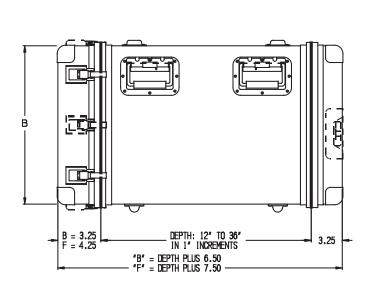
<sup>1.</sup> ADDITIONAL LATCHES REQUIRED FOR WATERTIGHT ("S") OPTION. PANEL HEIGHT DASH NO. 14 THRU 28 ADD: 2 LATCHES (6 TOTAL)

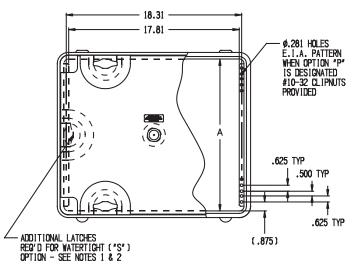


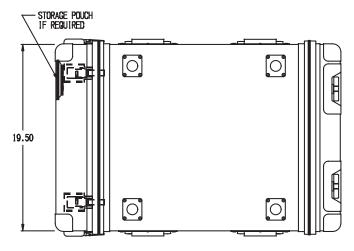


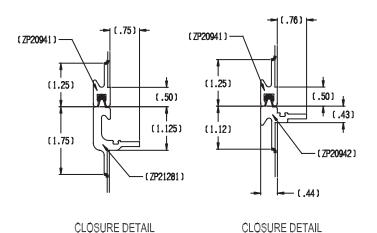
PANEL HEIGHT			
Dash No.	"A" Dim.	"A" Dim. "U" Size "B" Dim	
Х	Specia	al Size	
-5	5.25	(3U)	6.12
-7	7.00	(4U)	7.87
-8	8.75	(5U)	9.62
-10	10.50	(6U)	11.37
-14	14.00	(8U)	14.87
-17	17.50	(10U)	18.37
-21	21.00	(12U)	21.87
-24	24.50	(14U)	25.37
-28	28.00	(16U)	28.87

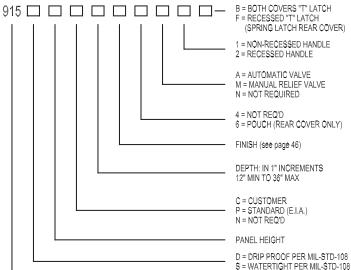
- 1. HANDLES
- 2 REQUIRED FOR DEPTHS OF 12 TO 18 INCHES. 4 REQUIRED FOR DEPTHS OF 19 TO 36 INCHES.
- 2. ADDITIONAL LATCHES REQUIRED FOR WATERTIGHT ("S") OPTION. PANEL HEIGHT DASH NO. 5 THRU 8 ADD: 8 LATCHES (12 TOTAL.) PANEL HEIGHT DASH NO. 10 THRU 17 ADD: 8 LATCHES (16 TOTAL.) PANEL HEIGHT DASH NO. 21 THRU 28 ADD: 8 LATCHES (20 TOTAL.)











PANEL HEIGHT			
Dash No.	"A" Dim.	"U" Size	"B" Dim.
X	Special Size		
-7	7.00	(4U)	7.87
-8	8.75	(5U)	9.62
-10	10.50	(6U)	11.37
-14	14.00	(8U)	14.87
-17	17.50	(10U)	18.37
-21	21.00	(12U)	21.87
-24	24.50	(14U)	25.37
-28	28.00	(16U)	28.87

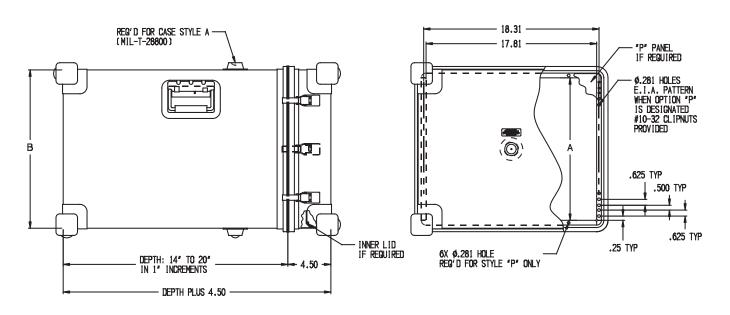
(SPRING LATCH)

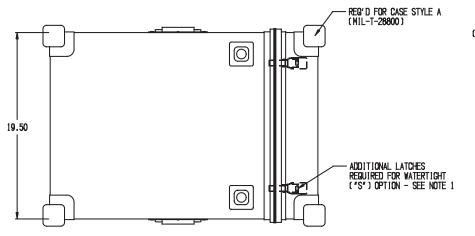
("T" LATÇH)

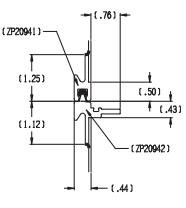
### NOTES:

- ADDITIONAL SPRING LATCHES REQUIRED FOR WATERTIGHT ("S") OPTION.
  PANEL HEIGHT DASH NO. 5 THRU 8 ADD: 4 LATCHES (6 TOTAL)
  PANEL HEIGHT DASH NO. 10 THRU 17 ADD: 4 LATCHES (8 TOTAL)
  PANEL HEIGHT DASH NO. 21 THRU 28 ADD: 6 LATCHES (10 TOTAL)
- 2. ADDITIONAL "T" LATCHES REQUIRED FOR WATERTIGHT ("S") OPTION. PANEL HEIGHT DASH NO. 14 THRU 28 ADD: 2 LATCHES (6 TOTAL)

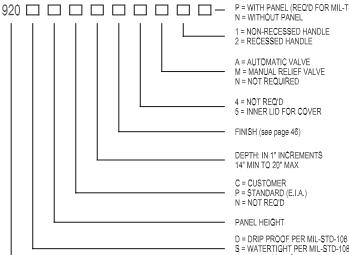
CASE SERIES







**CLOSURE DETAIL** 



P = WITH PANEL (REQ'D FOR MIL-T-28800)

S = WATERTIGHT PER MIL-STD-108

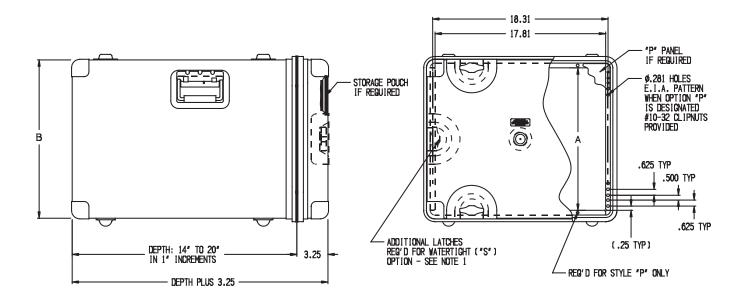
A = MIL-T-28800, \$TYLE A

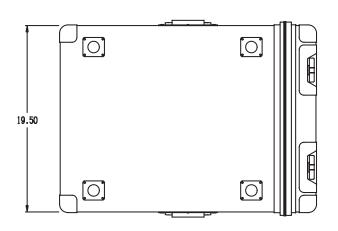
CASE SERIES

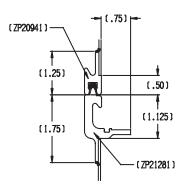
PANEL HEIGHT			
Dash No.	"A" Dim.	"U" Size	"B" Dim.
Х	Special Size		
-5	5.25	(3U)	6.94
-7	7.00	(4U)	8.69
-8	8.75	(5U)	10.44
-10	10.50	(6U)	12.19
-14	14.00	(U8)	15.69
-17	17.50	(10U)	19.19
-21	21.00	(12U)	22.69
-24	24.50	(14U)	26.19
-28	28.00	(16U)	29.69

#### NOTES:

1. ADDITIONAL LATCHES REQUIRED FOR WATERTIGHT ("S") OPTION. PANEL HEIGHT DASH NO. 5 ADD: 4 LATCHES (6 TOTAL)
PANEL HEIGHT DASH NO. 7 THRU 17 ADD: 4 LATCHES (8 TOTAL)
PANEL HEIGHT DASH NO. 21 THRU 28 ADD: 6 LATCHES (10 TOTAL)







CLOSURE DETAIL

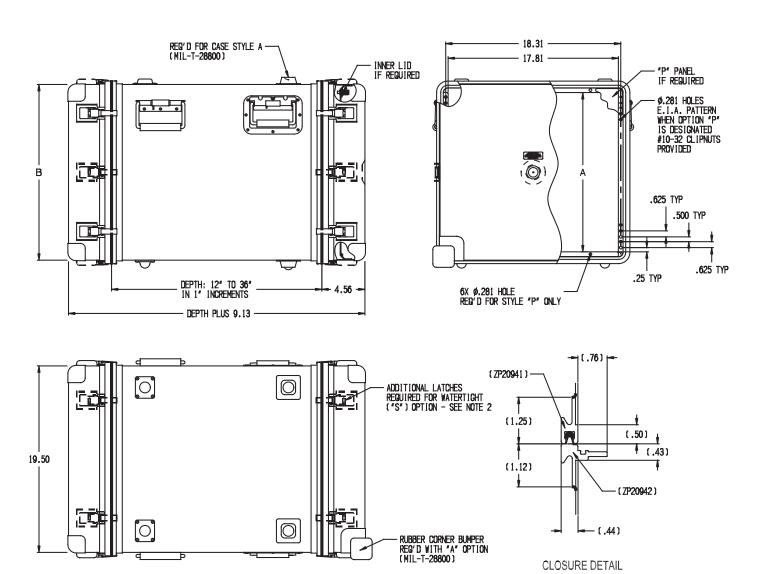
PART NUMBER	
925 🗆 🗆 🗆 🗆 🗆 🗆 🗆 —	P = WITH PANEL N = WITHOUT PANEL
	1 = NON-RECESSED HANDLE 2 = RECESSED HANDLE
	A = AUTOMATIC VALVE M = MANUAL RELIEF VALVE N = NOT REQUIRED
	4 = NOT REQ'D 5 = INNER LID FOR COVER
	FINISH (see page 45)
	DEPTH: IN 1" INCREMENTS 14" MIN TO 20" MAX
	C = CUSTOMER P = \$TANDARD (E.I.A.) N = NOT REQ'D
	PANEL HEIGHT
	D = DRIP PROOF PER MIL-\$TD-108 S = WATERTIGHT PER MIL-\$TD-108

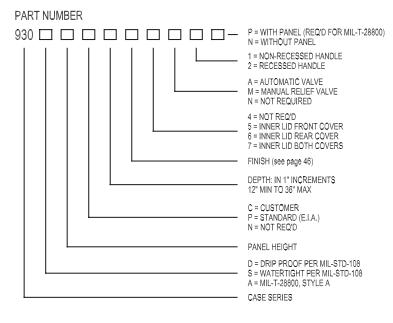
PANEL HEIGHT			
Dash No.	No. "A" Dim. "U" Size "B" Dim		"B" Dim.
X	Specia	al Size	
-5	Not Available - See 920 Series		
-7	7.00	(4U)	8.69
-8	8.75	(5U)	10.44
-10	10.50	(6U)	12.19
-14	14.00	(U8)	15.69
-17	17.50	(10U)	19.19
-21	21.00	(12U)	22.69
-24	24.50	(14U)	26.19
-28	28.00	(16U)	29.69

#### NOTES:

1. ADDITIONAL LATCHES REQUIRED FOR WATERTIGHT ("S") OPTION. PANEL HEIGHT DASH NO. 7 THRU 17 ADD: 4 LATCHES (8 TOTAL) PANEL HEIGHT DASH NO. 21 THRU 28 ADD: 6 LATCHES (10 TOTAL)

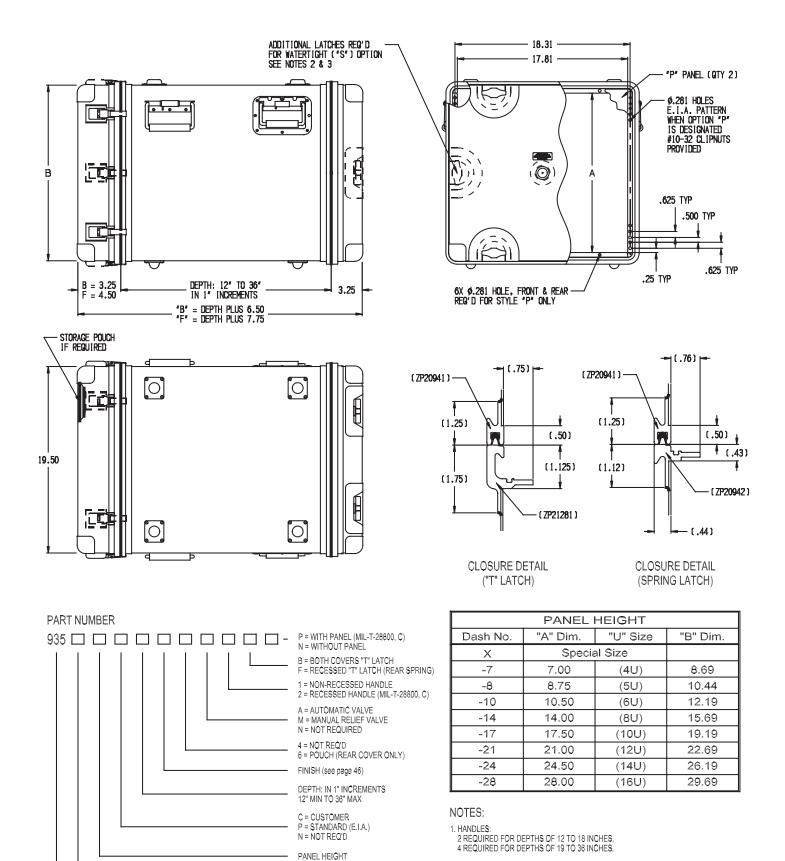
CASE SERIES





PANEL HEIGHT			
Dash No.	"A" Dim.	"U" Size	"B" Dim.
Х	Special Size		
-5	5.25	(3U)	6.94
-7	7.00	(4U)	8.69
-8	8.75	(5U)	10.44
-10	10.50	(6U)	12.19
-14	14.00	(8U)	15.69
-17	17.50	(10U)	19.19
-21	21.00	(12U)	22.69
-24	24.50	(14U)	26.19
-28	28.00	(16U)	29.69

- 1. HANDLES:
- 2 REQUIRED FOR DEPTHS OF 12 TO 18 INCHES. 4 REQUIRED FOR DEPTHS OF 19 TO 36 INCHES.
- ADDITIONAL LATCHES REQUIRED FOR WATERTIGHT ("S") OPTION. PANEL HEIGHT DASH NO. 5 ADD: 4 LATCHES (6 TOTAL) PANEL HEIGHT DASH NO. 7 THRU 17 ADD: 4 LATCHES (8 TOTAL) PANEL HEIGHT DASH NO. 21 THRU 28 ADD: 6 LATCHES (10 TOTAL)



D = DRIP PROOF PER MIL-STD-108 S = WATERTIGHT PER MIL-STD-108

A = MIL-T-28800, \$TYLE C

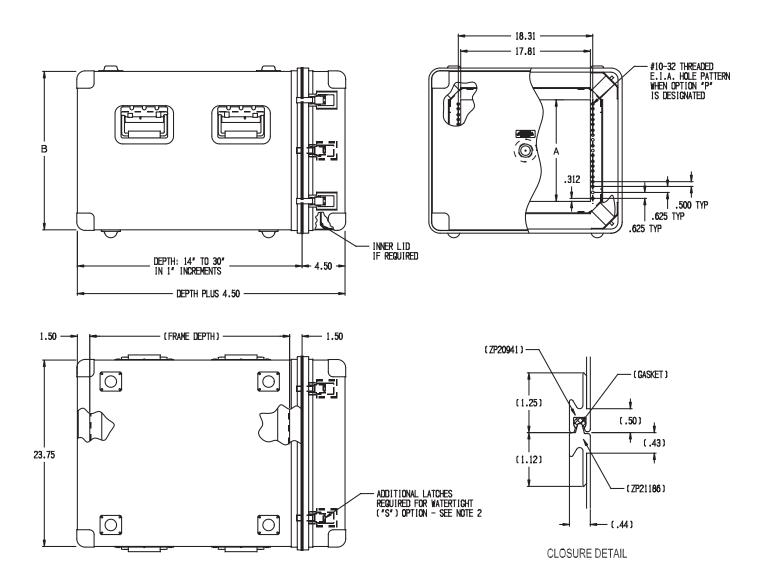
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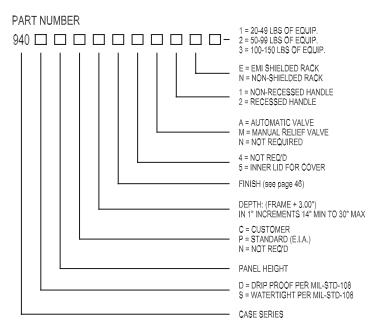
2. ADDITIONAL SPRING LATCHES REQUIRED FOR WATERTIGHT ("S") OPTION. PANEL HEIGHT DASH NO. 7 THRU 17 ADD: 4 LATCHES (8 TOTAL)

PANEL HEIGHT DASH NO. 21 THRU 28 ADD: 6 LATCHES (10 TOTAL)

3. ADDITIONAL "T" LATCHES REQUIRED FOR WATERTIGHT ("S") OPTION.

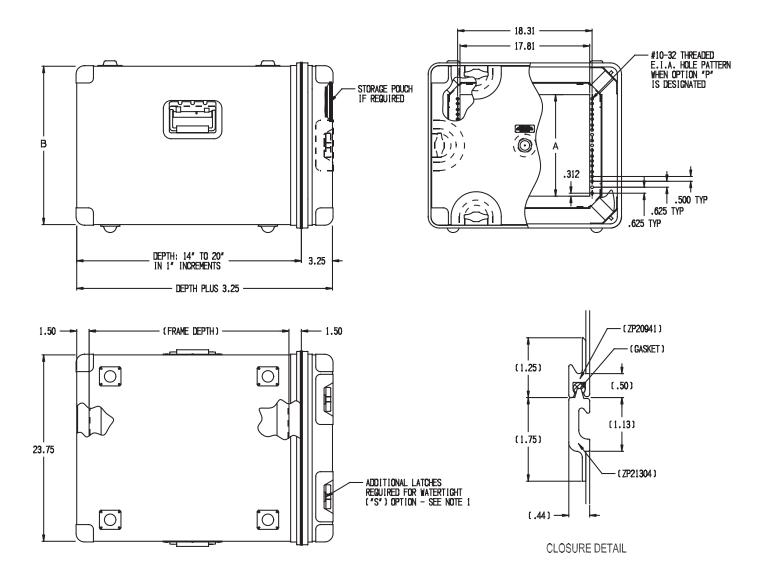
PANEL HEIGHT DASH NO. 17 THRU 21 ADD: 2 LATCHES (6 TOTAL) PANEL HEIGHT DASH NO. 24 THRU 28 ADD: 4 LATCHES (8 TOTAL)





PANEL HEIGHT			
Dash No.	"A" Dim.	"U" Size	"B" Dim.
X	Special Size		
-5	5.37	(3U)	11.31
-7	7.12	(4U)	13.06
-8	8.87	(5U)	14.81
-10	10.62	(6U)	16.56
-14	14.12	(8U)	20.06
-17	17.62	(10U)	23.56
-21	21.12	(12U)	27.06
-24	24.62	(14U)	30.56
-28	28.12	(16U)	34.06

- 1. HANDLES:
- 2 REQUIRED FOR DEPTHS OF 14 TO 20 INCHES. 4 REQUIRED FOR DEPTHS OF 21 TO 30 INCHES.
- 2. ADDITIONAL LATCHES REQUIRED FOR WATERTIGHT ("S") OPTION. PANEL HEIGHT DASH NO. 5 THRU 17 ADD: 4 LATCHES (8 TOTAL) PANEL HEIGHT DASH NO. 21 THRU 28 ADD: 6 LATCHES (10 TOTAL)

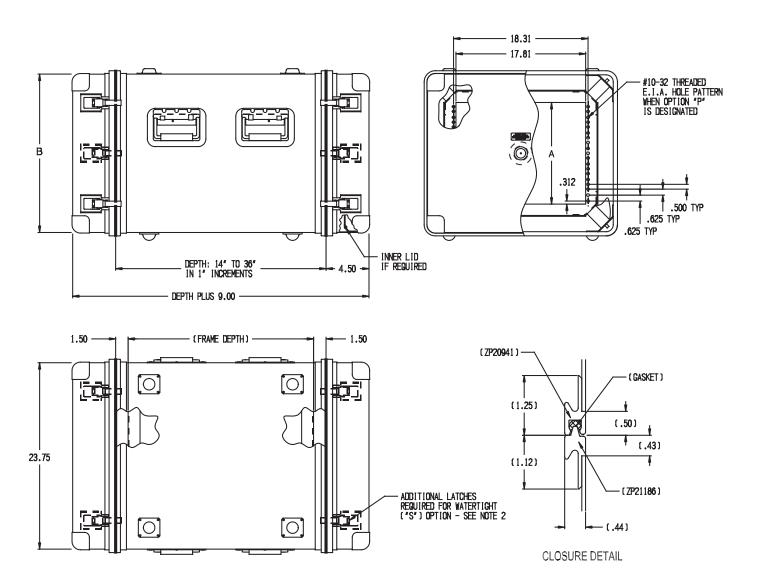


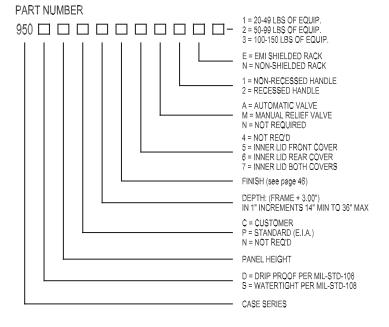
PART NUMBER	
945	1 = 20-49 LBS OF EQUIP. 2 = 50-99 LBS OF EQUIP. 3 = 100-150 LBS OF EQUIP. E = EMI SHIELDED RACK
	N = NON-SHIELDED RACK 1 = NON-RECESSED HANDLE 2 = RECESSED HANDLE
	A = AUTOMATIC VALVE M = MANUAL RELIEF VALVE N = NOT REQUIRED
	4 = NOT REQ'D 5 = POUCH
	FINISH (see page 46)
	DEPTH: (FRAME + 3.00") IN 1" INCREMENTS 14" MIN TO 20" MAX
	C = CUSTOMER P = \$TANDARD (E.I.A.) N = NOT REQ'D
	PANEL HEIGHT
	D = DRIP PROOF PER MIL-STD-108 \$ = WATERTIGHT PER MIL-STD-108
	CASE SERIES

PANEL HEIGHT			
Dash No.	"A" Dim.	"U" Size	"B" Dim.
X	Specia	Special Size	
-5	5.37	(3U)	11.31
-7	7.12	(4U)	13.06
-8	8.87	(5U)	14.81
-10	10.62	(6U)	16.56
-14	14.12	(8U)	20.06
-17	17.62	(10U)	23.56
-21	21.12	(12U)	27.06
-24	24.65	(14U)	30.56
-28	28.12	(16U)	34.06

#### NOTES:

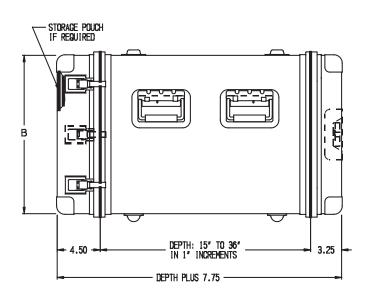
 ADDITIONAL LATCHES REQUIRED FOR WATERTIGHT ("S") OPTION. PANEL HEIGHT DASH NO. 14 THRU 17 ADD: 4 LATCHES (6 TOTAL) PANEL HEIGHT DASH NO. 21 THRU 28 ADD: 4 LATCHES (8 TOTAL)

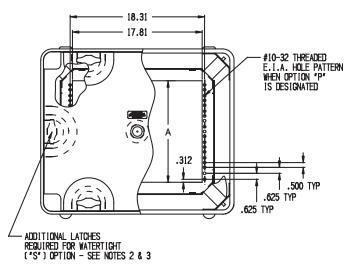


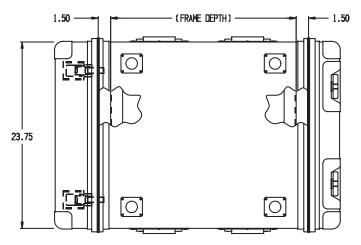


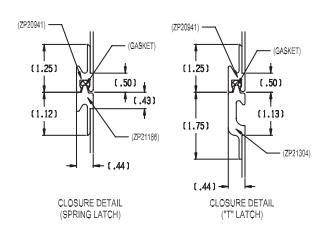
PANEL HEIGHT			
Dash No.	"A" Dim.	"U" Size	"B" Dim.
X	Special Size		
-5	5.37	(3U)	11.31
-7	7.12	(4U)	13.06
-8	8.87	(5U)	14.81
-10	10.62	(6U)	16.56
-14	14.12	(8U)	20.06
-17	17.62	(10U)	23.56
-21	21.12	(12U)	27.06
-24	24.62	(14U)	30.56
-28	28.12	(16U)	34.06

- 1. HANDLES:
- 2 REQUIRED FOR DEPTHS OF 14 TO 18 INCHES. 4 REQUEED FOR DEPTHS OF 19 TO 36 INCHES.
- ADDITIONAL LATCHES REQUIRED FOR WATERTIGHT ("S") OPTION. PANEL HEIGHT DASH NO. 5 THRU 17 ADD: 8 LATCHES (16 TOTAL) PANEL HEIGHT DASH NO. 21 THRU 28 ADD: 12 LATCHES (20 TOTAL)

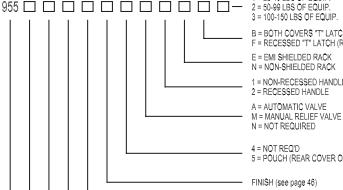








#### PART NUMBER



- 1 = 20-49 LBS OF EQUIP. 2 = 50-99 LBS OF EQUIP.
- 3 = 100-150 LBS OF EQUIP.
- B = BOTH COVER\$ "T" LATCH F = RECESSED "T" LATCH (REAR SPRING)
- E = EMI SHIELDED RACK
- 1 = NON-RECESSED HANDLE
- 2 = RECESSED HANDLE

- 5 = POUCH (REAR COVER ONLY)

DEPTH: (FRAME + 3.00") IN 1" INCREMENTS 15" MIN TO 36" MAX

C = CUSTOMER

P = STANDARD (E.I.A.)

N = NOT REQ'D

PANEL HEIGHT

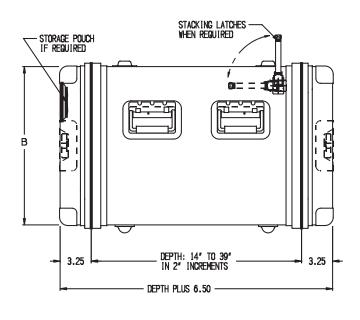
D = DRIP PROOF PER MIL-STD-108

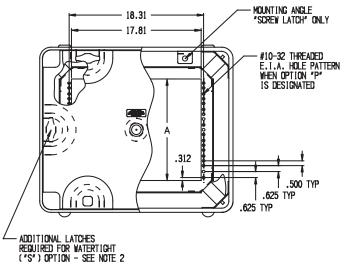
\$ = WATERTIGHT PER MIL-\$TD-108

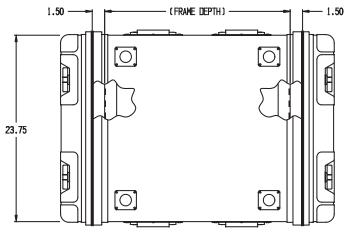
CASE SERIES

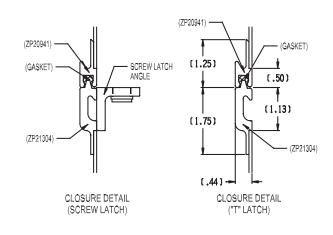
PANEL HEIGHT			
Dash No.	"A" Dim.	"U" Size	"B" Dim.
Х	Special Size		
-5	5.37	(3U)	11.31
-7	7.12	(4U)	13.06
-8	8.87	(5U)	14.81
-10	10.62	(6U)	16.56
-14	14.12	(8U)	20.06
-17	17.62	(10U)	23.56
-21	21.12	(12U)	27.06
-24	24.62	(14U)	30.56
-28	28.12	(16U)	34.06

- 1. HANDLES:
- 2 REQUIRED FOR DEPTHS OF 15 TO 18 INCHES. 4 REQURED FOR DEPTHS OF 19 TO 36 INCHES.
- 2. ADDITIONAL SPRING LATCHES REQUIRED FOR WATERTIGHT ("S") OPTION. PANEL HEIGHT DASH NO. 5 THRU 17 ADD: 4 LATCHES (8 TOTAL)
  PANEL HEIGHT DASH NO. 21 THRU 28 ADD: 6 LATCHES (10 TOTAL)
- 3. ADDITIONAL "T" LATCHES REQUIRED FOR WATERTIGHT ("S") OPTION. PANEL HEIGHT DASH NO. 14 THRU 17 ADD: 2 LATCHES (6 TOTAL) PANEL HEIGHT DASH NO. 21 THRU 28 ADD: 4 LATCHES (8 TOTAL)

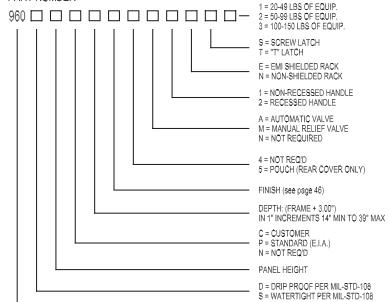








#### PART NUMBER



PANEL HEIGHT			
Dash No.	"A" Dim.	"U" Size	"B" Dim.
Х	Specia	al Size	
-5	N/A	N/A	N/A
-7	7.12	(4U)	13.06
-8	8.87	(5U)	14.81
-10	10.62	(6U)	16.56
-14	14.12	(8U)	20.06
-17	17.62	(10U)	23.56
-21	21.12	(12U)	27.06
-24	24.62	(14U)	30.56
-28	28.12	(16U)	34.06

#### NOTES:

- 1. HANDLES:
- 2 REQUIRED FOR DEPTHS OF 15 TO 18 INCHES. 4 REQUIRED FOR DEPTHS OF 19 TO 39 INCHES.
- ADDITIONAL "T" / SCREW LATCHES REQUIRED FOR WATERTIGHT ("S") OPTION. PANEL HEIGHT DASH NO. 14 THRU 17 ADD: 4 LATCHES (8 TOTAL) PANEL HEIGHT DASH NO. 21 THRU 28 ADD: 8 LATCHES (12 TOTAL)

CASE SERIES