CATALOGUE MENU

- Corrosion Monitoring
- Access Fittings
- Chemical Injection

CORROSION MONITORING

ELECTRICAL RESISTANCE

WEIGHT LOSS COUPONS

LINEAR POLARISATION

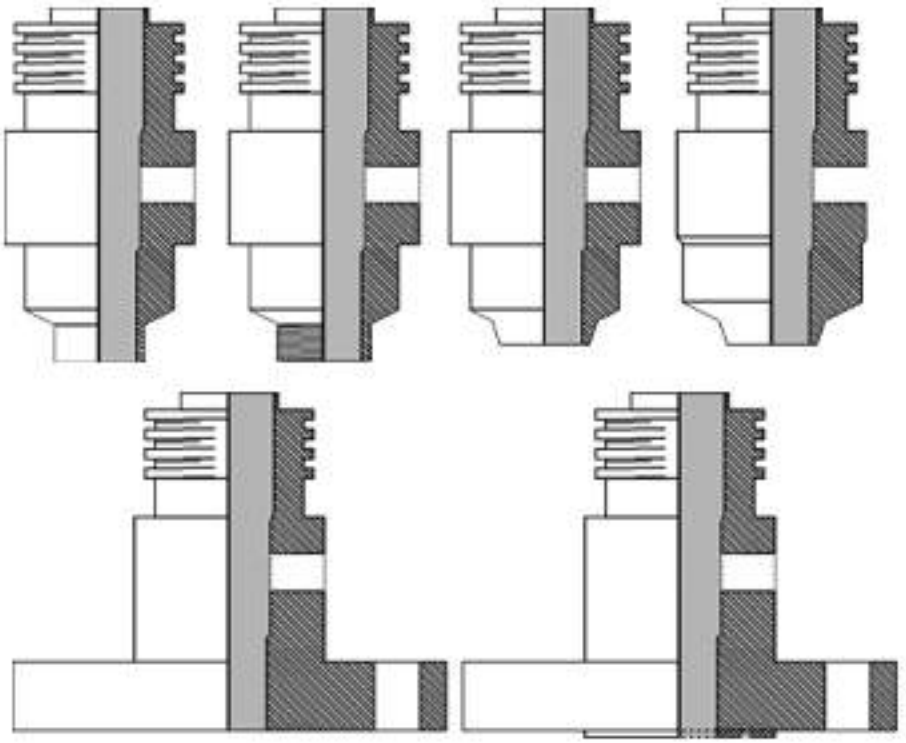
MISCELLANEOUS

BACK TO MAIN MENU

ACCESS FITTINGS

- ASSEMBLIES
- Non-Tee Fittings
- Tee Access Fittings
- Accessories
- Seals and O Rings
- Retriever Kit
- Service Valve Kit
- Hot Tap Tools

Hydraulic Retriever Kit



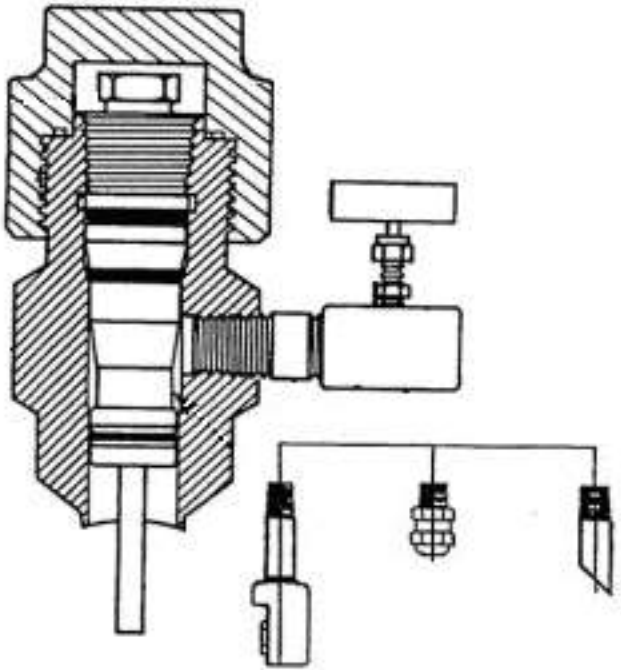
BACK TO MAIN MENU

CHEMICAL INJECTION

Injection and Sampling

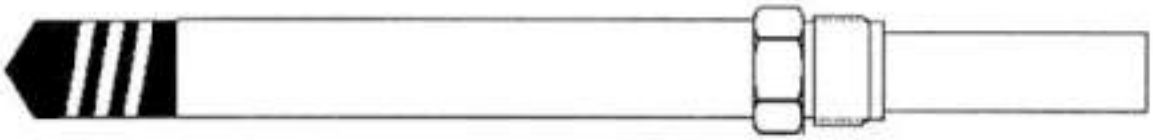
IP4000

SKID UNITS



BACK TO MAIN MENU

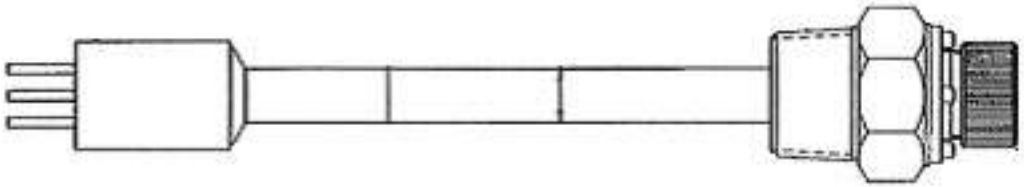
ELECTRICAL RESISTANCE



MS 0500
MS 1500E
MS 2500E
MS 3500E
ER 0250
ER 0500
ER 1000
ER 2000
ER 2100
ER 3000
ER 3100
ER 4000
ER 4100 / 4100HT
ER 4200
ER 6000
ER 6100
ER 6104
ER 7000
ER 7100
ER 7200
ER 7210
ER 7220
ER 7300
Retracting Sys
Model 600
Accessories

BACK TO CORROSION MONITORING MENU

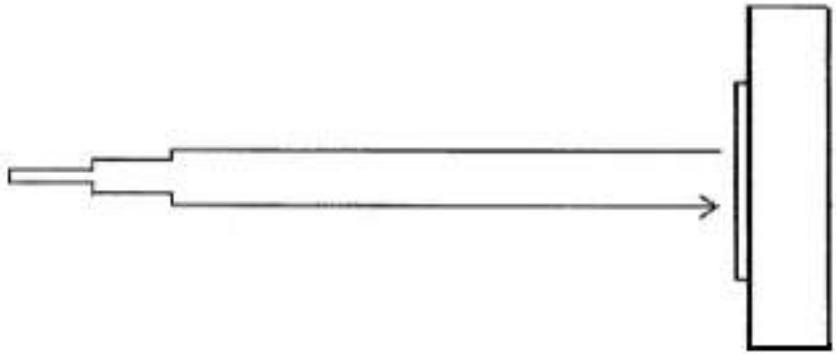
LINEAR POLARISATION



MS 1500L
MS 2500L
MS 3500L
S1000
S2000
S3000
S3002
S3006
LP1000
LP1100
LP2000
LP2100
LP3000
LP3010
LP3100
LP4000
LP4100
LP4104
LP7000
LP7100
LP7210
Electrodes and Gaskets
Accessories

BACK TO CORROSION MONITORING MENU

WEIGHT LOSS COUPONS



RT6000 | HC Coupon Probes | Coupon Specifications | Test Racks

SR4000 | Two Inch System | Water Treatment Industry | Alloys

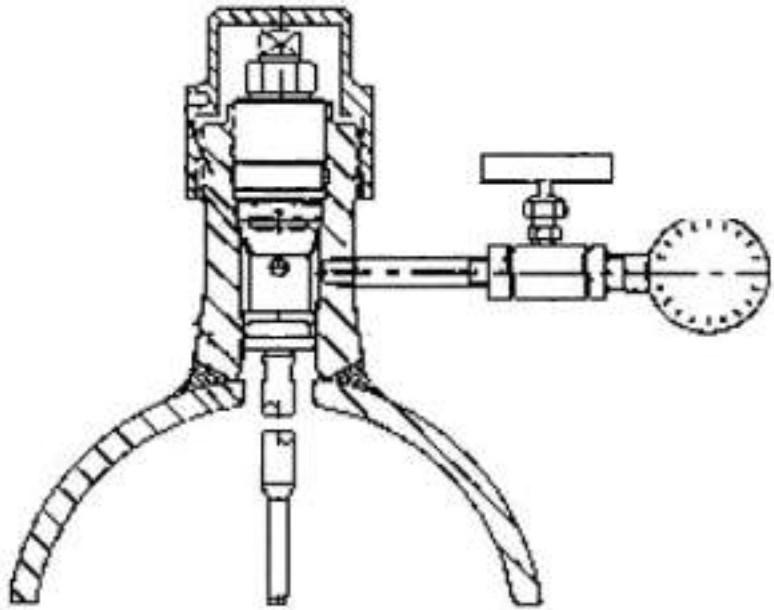
BACK TO CORROSION MONITORING MENU

MISCELLANEOUS

SP7000

HC6200

HY7000



BACK TO CORROSION MONITORING MENU

RCSL

ROSE CORROSION SERVICES LIMITED

1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

MS0500 E/R Corrosion Meter

The **MS0500** is a battery-powered, portable corrosion meter capable of interpreting all electrical resistance type corrosion probes. Combining a light weight of only 4 pounds with ease of operation, the **MS0500** enables the operator to take readings from several different probe locations. The unit comes in a convenient leather carrying case. Corrosion rate measurements are made using the electrical resistance method. The electrical resistance method has a wide range of applications since it can be used in conductive or non-conductive environments including oil and gas. The unit measures the change in resistance of the probe element as metal loss occurs. The rate of change is directly proportional to the corrosion rate. The **MS0500** has a permanently attached cable that the operator can simply connect to a probe and take the reading. A selector switch is provided on the unit's display panel for indicating the probe element type to be read. All electrical resistance probe types can be used with this unit, including wire loop, tube loop, cylindrical and flush mount probes.

BACK TO ELECTRICAL RESISTANCE MENU

SCROLL DOWN FOR SECOND PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Technical Specifications

E/R Probe Configurations:

- Wire Loop … WIRE Probe verification … CHECK
- Tube Loop … TUBE Others (Flush, Strip, Loop, Etc.)… DUAL
- Cylindrical… SPEC

Dimensions with Leather Case:

- **Height:** 4.4 inches (11.2cms)
- **Width:** 9.0 inches (22.9cms)
- **Depth:** 8.0 inches (20.3cms)

Dimensions without Leather Case:

- **Height:** 3.0 inches (7.6cms)
- **Width:** 5.0 inches (12.2cms)
- **Depth:** 6.75 inches) (17.2 cm)

Weight with Leather Case:	4 pounds, 12 ounces (2.2kg)
Weight without Leather Case:	2 pounds, 4 ounces (1.0kg)
Power Requirements:	Two 9 volt alkaline batteries
Temperature Range:	32º to 120º F (0º to 50º C)
Operational Humidity Range:	30% to 90%
Storage Humidity Range:	5% to 95%
Length of Connecting Cable:	6 feet (2 metres)

Intrinsic Safety:

- BASEEFA certified
- EEx ib [ia] IIB T2
- Equivalent to: North American Class 1 Division 1
- Zone 0 Temperature T2

Part # IN0500

BACK TO ELECTRICAL RESISTANCE MENU

ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE +44(0)1635 552225 FAX: +44(0)1635 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

MS1500E Corrosion Meter

The **MS1500E** is an intrinsically-safe, battery-powered, hand-held corrosion meter that enables you to directly take measurements from an electrical resistance probe, store the data, and upload directly to a computer. The unit features an easy-to use Main Menu that will permit even an operator who is unfamiliar with the unit to take readings with ease.

Corrosion rate measurements are made using the electrical resistance method. The electrical resistance method has a wide range of applications since it can be used in conductive or nonconductive environments including oil and gas. The unit measures the change in resistance of the probe element as metal loss occurs. The rate of change is directly proportional to the corrosion rate.

After taking and storing a reading, the operator can display the metal loss in mils and the corrosion rate in mils per year (mpy). All measurements made with the unit are automatically time and date stamped with the internal real time clock. If the detects a probe with an internal leak or damaged element, a CHECK FAILED message occurs. The unit can take up to 3000 readings and can be used with up to 150 probes. All stored readings are protected by a lithium back-up battery to prevent loss.

Data may be selectively deleted from memory to accommodate additional information once the 3000 reading capacity is reached. Alternatively, information may be downloaded to an IBM compatible PC as a comma delimited ASCII file for import into any of the standard data handling and analysis programs (e.g., EXCEL®, LOTUS 123®, Quattro Pro®).

The **MS1500E** may also be used as a data collection and transfer terminal for the remote data logger. Accumulated data from several field-based units may be locally downloaded to the **MS1500E** hand-held terminal, and then transferred to a PC for further analysis.

The **MS1500E** may also be used as a data collection and transfer terminal for the remote data logger. Accumulated data from several field-based units may be locally downloaded to the **MS1500E** hand-held terminal, and then transferred to a PC for further analysis. The **MS1500E** offers seven operating modes: Select Probe, Make Measurements, Compute, Recall, Delete Readings, Communicate, and Set Time and Date. All electrical resistance probe types can be used with this unit, including wire loop, tube loop, cylindrical element, surface strip, and flush mount probes.

BACK TO ELECTRICAL RESISTANCE MENU

SCROLL DOWN FOR SECOND PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE +44(0)1635 552225 FAX: +44(0)1635 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Technical Specifications

E/R Probe Configurations:			
	Wire Loop	Surface Strip	Cylindrical Element
	Tube Loop	Flush Mount	

Operating Temperature Range:	32°F to 122°F (0°C to 50°C)
Storage Temperature Range:	-4°F to 158°F (-20°C to 70°C)
Operational Humidity Range:	30% - 90%
Storage Humidity Range:	5% - 95%
Weight:	1.5 lbs. (5.2 lbs. with hardshell case)
Dimensions:	7.63 inches (h) x 4.15 inches (w) x 2.00 inches (d) 194 mm (h) x 105 mm (w) x 50 mm (d)
Battery:	Three 1.5V AA Alkaline
Battery Life:	8 hours of continuous use
Memory Protection:	10-year battery, back-up life
Maximum # of Probe Storage Files:	150
Maximum # of Stored Readings:	3100
Measurements/Computation:	Probe Life (0-100.0%) Metal Loss (Mils/Year)
Communication Port:	RS-232 Serial Port
Display:	4-Line x 20 character LCD Panel
Part #:	IN1500

Intrinsic Safety: ETL LISTED 9900750

Class 1, Division 1
Groups A, B, C and D
Temperature Code T3C
Class I, Zone 0
Group IIC, T3C
Conforms to ANSI UL Std. 913

BACK TO ELECTRICAL RESISTANCE MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

MS2500E Transmitter

The **MS2500E** is a microprocessor controlled transmitter that features transmission through a 4- 20mA current loop. The unit is designed to provide a direct linear measurement of corrosion occurring at a specific location.

The **MS2500E** is encased in a UL-approved explosion and weather proof NEMA enclosure. Operating temperatures range from 0^{o} F to 140^{o} F. The unit provides excellent results with all electrical resistance probes, especially the wire and tube loop types. The instrument is supplied with a 5-foot instrument-to-probe extension cable with connector.

Information can be transmitted to the MS2510 Receiver or a customer-supplied data receiver via a 4 - 20mA current loop. The 4 -20mA signal range permits the unit to be used with a variety of receivers with minimal programming required by the user. Programming is based on the simple formula:

$$\frac{PM(mA-4)}{16} = M\,L$$

Where:
PM = probe multiplier
mA = milliamp reading
M L = metal loss in mils

Corrosion rate measurements are made with the electrical resistance method. The electrical resistance method has a wide range of applications since it can be used in conductive or non-conductive environments including oil and gas. The unit measures the change in resistance of the probe element as metal loss occurs. The rate of change is directly proportional to the corrosion rate.

BACK TO ELECTRICAL RESISTANCE MENU

SCROLL DOWN FOR SECOND PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Technical Specifications
MS2500E Transmitter (BASEEFA Certified)

E/R Probe Selections:	Switch selectable for Wire Loop, Tube Loop, Cylindrical Element and special
Weight:	5.02 lbs. (2.28kg)
Power Requirements:	10 to 25V DC
Output:	4 - 20mA linear signal
Operating Temperature Range:	0°F to 140°F (-18°C to 60°C)
Storage Temperature Range:	-40°F to 140°F (-40°C to 80°C)
Dimensions:	5.81” Long x 4.50” Wide x 4.81” Deep (14.76cms x 11.43cms x 12.22cms)
Mounting Requirements:	Mounting hardware is supplied with the unit. It may be mounted up to 5 feet (1.5 metres) from the probe location to a flat surface or pipe.
Enclosure:	Adalet explosion proof. NEMA 4 Class I, Gr. B, C, D; Class II, Gr. E, F, G; Class III
Intrinsic Safety:	CENELEC EN 50 020, EEX ia IIB T4 Sira certificate Ex96D2077
Part #:	IN2500

MS2510 Receiver (BASEEFA Certified)

Power Requirements:	1120/240V/60/50Hz
Maximum transmitter to receiver Range:	10,000 ft (3048m)
Weight:	4 lbs. (1.9kg)
Dimensions:	8.25” Long x 10.00” Wide x 6.00” Deep (20.96cms x 25.40cms x 15.24cms)
Output:	25V DC 4-20mA current loop drive/4-20mA and 0-10 Volts isolated output to recorder, CPU, etc.
Storage Temperature Range:	-40°F to 140°F (-40°C to 80°C)
Display:	Three-digit LED display. Three-position switch permits display of Loop Current (mA), Probe
Life:	(0-1000 units), and Metal Loss (mils)
Part #:	IN2510

BACK TO ELECTRICAL RESISTANCE MENU

ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE +44(0)1635 552225 FAX: +44(0)1635 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

MS3500E Data Logger

The **MS3500E** is a completely self-contained data logger for electrical resistance type probes. The **MS3500E** can be installed directly onto any type of electrical resistance probe and, once in place, will automatically read the probe at pre-selected time intervals and store the resulting data in the units internal memory. The internal memory will collect up to 3000 data points before data download as required. The data collection interval is programmable in hourly increments. Even at the minimum data collection interval (1 hour), data downloading need only be performed every eighty days. With more practical data collection intervals (8-12 hours), the unit may be unattended for as long as 6-8 months between downloading operations. The internal battery is capable of supplying the power requirements needed for months of continuous operation. The unit also has an auxiliary battery backup to prevent the loss of data in the event of main battery failure.

The **MS3500E** has a unique optical, infrared, RS232 communication link that is used to download the stored data either to an **MS1500E** portable E/R data logger or a laptop PC (IBM compatible). The optimal communication link is an integral part of the intrinsically safe design of the unit. Because the signal is optical and not electrical, it permits the unit to download data in hazardous areas without removing the instrument. Once the data is downloaded, it may be analyzed, reviewed, or reported by conventional spreadsheet, data base, or mathematical software packages.

Another unique feature of the **MS3500E** is the high level of internal intelligence. The two-line, 20-character LCD allows visual review of all historical data in memory and reads directly as "Total Metal Loss" and/or "Average Corrosion Rate". The LCD screen, together with the two-key membrane keypad, provides a user friendly, interactive, prompting system that is used for both system setup and data review. This makes the **MS3500E** the most advanced unit of its type on the market.

The **MS3500E** comes in a NEMA 4X (IP 65) enclosure. An optional feature of the unit is the addition of a 4-20mA continuous output transmitter.

BACK TO ELECTRICAL RESISTANCE MENU **SCROLL DOWN FOR SECOND PAGE**

ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE +44(0)1635 552225 FAX: +44(0)1635 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Technical Specifications

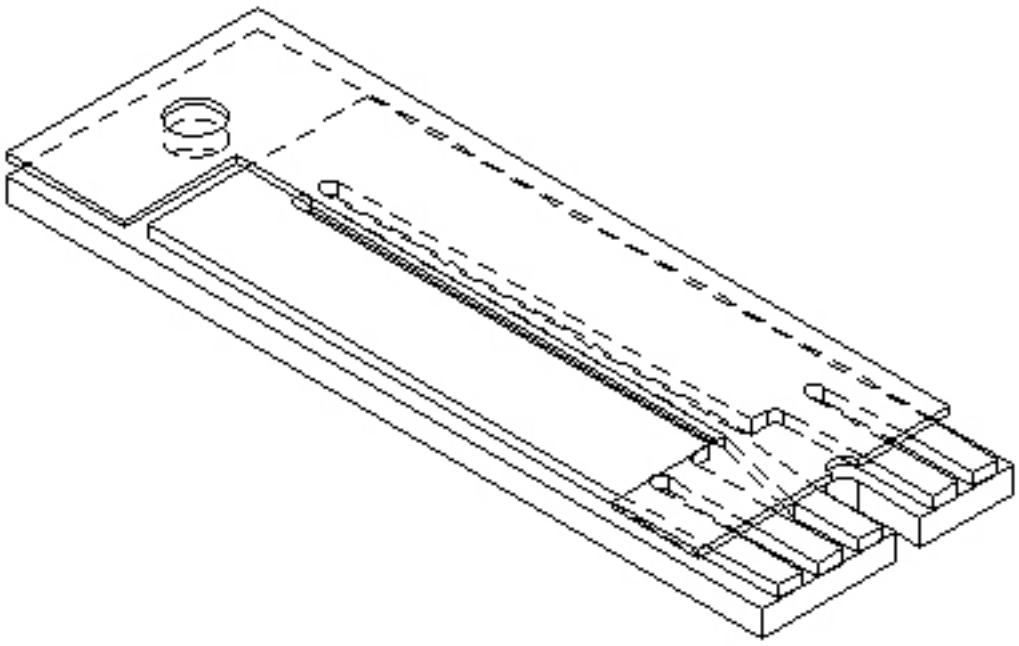
Functions:	Total Metal Loss (mls) Average Corrosion Rate (mpy)
Display:	Two-line LCD, 20 characters
Control:	Two-key membrane keypad
Memory Capacity:	3100 readings, screen reviewable using scroll feature
Read Interval:	Programmable, hourly increments (1-1000)
Communication Link:	Infrared, RS232 (standard), 4-20mA (optional)
Enclosure:	NEMA 4X (IP65)
Dimensions:	11.50 inches (h) x 8.94 inches (w) x 4.00 inches (d) 292 mm (h) x 227 mm (w) x 102 mm (d) (NEMA 4X)
Power:	Six 1.5V "AA" Dry Cell Batteries
Weight:	11.94lbs (5.42kg)
Part #:	IN3500 (Remote E/R Data Logger) IN3510 (Remote E/R Data Logger with 4-20mA output transmitter)

Intrinsic Safety: Class 1, Division 1
Groups A, B, C and D
Temperature Code T3C
Class I, Zone 0
Group IIC, T3C
Conforms to ANSI UL Std. 913

BACK TO ELECTRICAL RESISTANCE MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

ER0250 ATMOSPHERIC PROBE



Model ER0250 is a probe used to monitor corrosion in atmospheric environments. The probe consists of an element which is mounted onto an epoxy board. One side of the element is exposed to the corrosive environment while the other side is covered, acting as a reference element. The **ER0250** connects to a special cable that allows it to be used with electrical resistance probe instrumentation. Replacement elements may be ordered without cable. The probe comes with a 3/16" hole for easy mounting.

Specifications:	
Probe Body	Epoxy
Temperature Rating	250° F/121° C
Standard Element sizes	4 or 8 mils (useful range is half of thickness)

BACK TO ELECTRICAL RESISTANCE MENU

SCROLL DOWN FOR SECOND PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

ER0250 ORDERING INFORMATION

Model				
AP11	Atmospheric Probe			
	Element Thickness			
	04	4 mil thickness (2 mil useful probe life)		
	08	8 mil thickness (4 mil useful probe life)		
		Element Alloy		
		XXX	Use Code in Alloy Chart	
			Cable Length	
			00	No Cable
			10	10ft Cable
			20	20ft Cable
AP11	8	375	20	Example of Probe Ordering#

For alloys, sizes, or other special requirements not listed, contact our sales department.

Alloy Chart					
Code	Description	UNS#	Code	Description	UNS#
375	C1010	G10100	159	316L S.S	S31603
538	5Cr 1/2Mo	K42544	A12	C276	N10276
541	9Cr 1Mo	K90941	602	Alloy 625	N06625
186	410 S.S	S41000	419	CDA110	C11000
141	304 S.S	S30400	434	CDA443	C44300

Note: Not all alloys are available with all element types and seals.

BACK TO ELECTRICAL RESISTANCE MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

ER0500 - ELECTRICAL RESISTANCE PROBE
SURFACE STRIP ELEMENT AND CYLINDRICAL ELEMENT TYPES

Surface Strip Element Cylindrical Element

Model ER0500 probes are designed for heavy duty service conditions such as underground and structural monitoring of pipelines, vessels, above and below ground storage tanks and structures - whether cathodically protected or not. The surface strip element assembly is suited to the "construction site" environment. The cylindrical element is economical and durable. Its slim profile is convenient for locations with restricted access such as concrete bridge structures and other infrastructure applications. Both probes provide good sealing of the reference element and the check element provides confidence in the continued performance of the corrosion sensor. Either probe may or may not be connected to a cathodically protected structure. Connection of a ground cable allows the probe to measure the effectiveness of the Cathodic Protection (C.P.) System under all the operating conditions. If unconnected to the structure, the probe monitors the direct corrosivity of the soil or environment. The probes may be ordered with or without a grounding lead for a C.P. System. The lead may be installed at the probe or connector end, whichever is most convenient. In most cases, a lead at the monitoring connector end is preferred, with a separate lead running to the vessel or C.P. System. This enables connection to the C.P. System to be made as required - even after probe installation.

Specifications:		
	Surface Strip	Cylindrical
Probe Body	Epoxy Block	All welded element
Cable Connection	Heavy Duty Length	Heavy Duty Length with Bonded Heat Shrink Sleeving onto Element

BACK TO ELECTRICAL RESISTANCE MENU SCROLL DOWN FOR SECOND PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

ER0500 ORDERING INFORMATION

Model					
AP	Electrical Resistance Probe				
	Type				
	31	Under ground surface strip without ground strap			
	40	Under ground cylindrical with ground strap			
	61	Under ground surface strip with ground strap			
	70	Under ground cylindrical without ground strap			
		Element Thickness			
		10	10 mil thickness (5 mil useful probe life) - cylindrical or surface strip		
		20	20 mil thickness (10 mil useful probe life) - cylindrical or surface strip		
		40	40 mil thickness (20 mil useful probe life) - surface strip only		
		50	50 mil thickness (25 mil useful probe life) - cylindrical only		
			Element Alloy		
			XXX	Use Code in Alloy Chart	
				Cable Length	
				10	10ft cable
				20	20ft cable
AP	31	40	375	20	Example of Probe Ordering #

For alloys, sizes, or other special requirements not listed, contact our sales department.

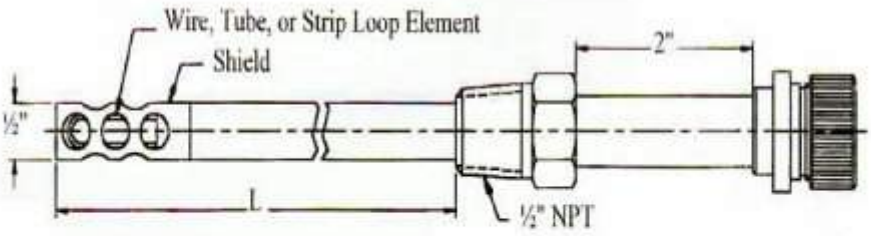
Alloy Chart					
Code	Description	UNS#	Code	Description	UNS#
375	C1010	G10100	159	316L S.S	S31603
538	5Cr 1/2Mo	K42544	A12	C276	N10276
541	9Cr 1Mo	K90941	602	Alloy 625	N06625
186	410 S.S	S41000	419	CDA110	C11000
141	304 S.S	S30400	434	CDA443	C44300

Note: Not all alloys are available with all element types and seals.

BACK TO ELECTRICAL RESISTANCE MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model ER 1000 - Electrical Resistance Probe with Fixed Length 1/2" NPT Pipe Plug Mount and Loop Element



All Dimensions in Inches

Model ER1000 Electrical Resistance Probe is a fixed-insertion-length probe with a ½" NPT pipe plug. The probe process isolation or process shutdown to install and a threaded pipe fitting to mount. With a maximum diameter of ½", the probe is ideal for applications where space is limited. The probe consists of an insertion rod with an element, a hermetically sealed connector, a ½" NPT fitting, and a velocity shield, which are all welded in place. Several standard loop elements and lengths are available to meet your specific needs. (Refer to the Element and Alloy Selection Chart for more information).

Specifications:	
Probe Body	316 Stainless Steel
Element Seal	Glass or Teflon
Fill Material	Ceramic
Temperature Rating	500° F/260° C
Pressure Rating	1000 PSI/68 Bar
Mounting	0.5 inch NPT Fitting

BACK TO ELECTRICAL RESISTANCE MENU
SCROLL DOWN FOR SECOND PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

ER1000 ORDERING INFORMATION

Model							
ER11	Electrical Resistance 0.5 inch NPT Pipe Plug Probe						
	Probe Body Material						
	2	316					
	3	C276					
		E/R Element Options					
		00	WR40 Wire Loop - 40 mil thickness (10 mil useful probe life)				
		10	WR80 Wire Loop - 80 mil thickness (20 mil useful probe life)				
		20	TU04 Tube Loop - 4 mil thickness (2 mil useful probe life)				
		30	TU08 Tube Loop - 8 mil thickness (4 mil useful probe life)				
		40	TU16 Tube Loop - 16 mil thickness (8 mil useful probe life)				
			Seal Type				
			1	Glass			
			2	Teflon			
			3	Epoxy			
				Length			
				06	4.08 inches max. insertion length		
				08	7.08 inches max. insertion length		
				12	11.08 inches max. insertion length		
				18	17.08 inches max. insertion length		
					Element Alloy		
					XXX	Use Code in Alloy Chart	
						E/R Probe Options	
						00	No Shield
						03	Shield
ER3	2	10	1	O8	375	O3	Example of Probe Ordering #

For alloys, sizes, or other special requirements not listed, contact our sales department.

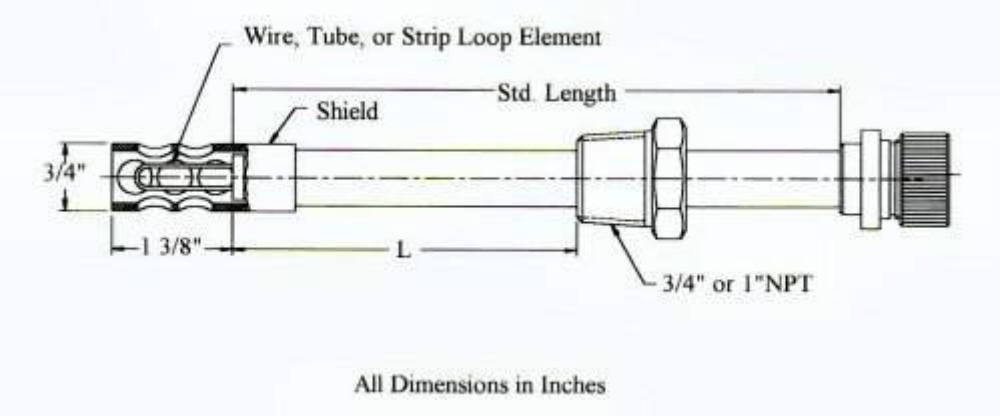
Alloy Chart					
Code	Description	UNS#	Code	Description	UNS#
375	C1010	G10100	159	316L S.S	S31603
538	5Cr 1/2Mo	K42544	A12	C276	N10276
541	9Cr 1Mo	K90941	602	Alloy 625	N06625
186	410 S.S	S41000	419	CDA110	C11000
141	304 S.S	S30400	434	CDA443	C44300

Note: Not all alloys are available with all element types and seals.

BACK TO ELECTRICAL RESISTANCE MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model ER 2000 - Electrical Resistance Probe with Fixed Length NPT Pipe Plug Mount and Loop Element



Model ER2000 Electrical Resistance Probe is a fixed-insertion-length probe with a ¾" or 1" NPT pipe plug. The probe requires process isolation or process shutdown to install and a threaded pipe fitting to mount. The probe assembly consists of an insertion rod with an element, a hermetically sealed connector, a ¾" or 1" NPT fitting, and a velocity shield, which are all welded in place. Several standard loop elements and lengths are available to meet your specific needs. (Refer to the Element and Alloy Selection Chart for more information)

Specifications:	
Element Seal	Glass or Teflon
Fill Material	Ceramic or Epoxy
Temperature Rating	500 ° F / 260 ° C
Pressure Rating	4000 PSI/277 Bar
Mounting	0.75 inch or 1 inch NPT Fitting (please specify size required)
Probe Body	316 Stainless Steel

STD. LENGTH
8"
12"
18"

BACK TO ELECTRICAL RESISTANCE MENU
SCROLL DOWN FOR SECOND PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

ER2000 ORDERING INFORMATION

Model								
ER2	Electrical Resistance Fixed Length Pipe Plug Probe							
	Pipe Plug Size							
	2	0.75 inch NPT Pipe Plug						
	3	1 inch NPT Pipe Plug						
		Probe Body Material						
		22	316					
		44	C276					
			E/R Element Options					
			00	WR40 Wire Loop - 40 mil thickness (10 mil useful probe life)				
			10	WR80 Wire Loop - 80 mil thickness (20 mil useful probe life)				
			20	TU04 Tube Loop - 4 mil thickness (2 mil useful probe life)				
			30	TU08 Tube Loop - 8 mil thickness (4 mil useful probe life)				
			40	TU16 Tube Loop - 16 mil thickness (8 mil useful probe life)				
			80	SL04 Strip Loop - 4 mil thickness (1 mil useful probe life)				
			90	SL08 Strip Loop - 8 mil thickness (2 mil useful probe life)				
				Seal Type				
				1	Glass			
				2	Teflon			
				3	Epoxy			
					Length			
					06	5.13 inches max. insertion length		
					08	7.13 inches max. insertion length		
					12	11.13 inches max. insertion length		
					18	17.13 inches max. insertion length		
						Element Alloy		
						XXX	Use Code in Alloy Chart	
							E/R Probe Options	
							00	No Shield
							03	Shield
ER2	2	22	10	1	8	375	3	Example of Probe Ordering #

For alloys, sizes, or other special requirements not listed, contact our sales department.

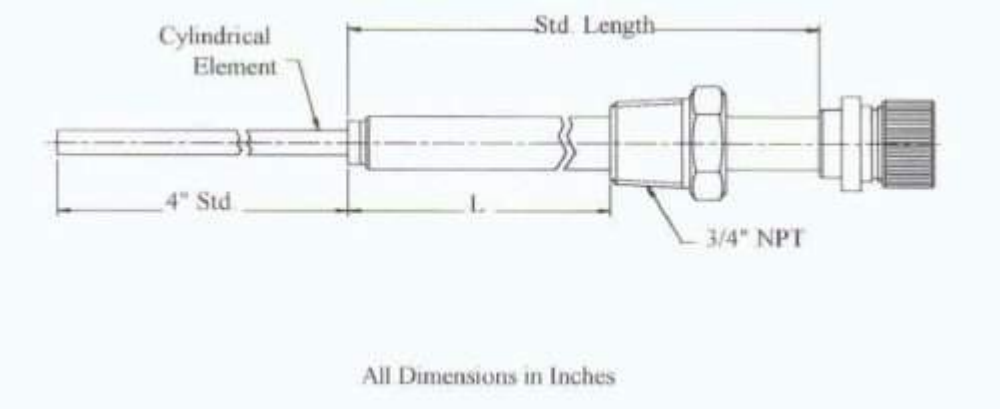
Alloy Chart					
Code	Description	UNS#	Code	Description	UNS#
375	C1010	G10100	159	316L S.S	S31603
538	5Cr 1/2Mo	K42544	A12	C276	N10276
541	9Cr 1Mo	K90941	602	Alloy 625	N06625
186	410 S.S	S41000	419	CDA110	C11000
141	304 S.S	S30400	434	CDA443	C44300

Note: Not all alloys are available with all element types and seals.

BACK TO ELECTRICAL RESISTANCE MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model ER 2100 - Electrical Resistance Probe with Fixed Length NPT Pipe Plug Mount and Loop Element



Model ER2100 Electrical Resistance Probe is a fixed-insertion-length probe with a ¾" NPT pipe plug. The probe requires process isolation or process shutdown to install and a threaded pipe fitting to mount. The all-welded construction allows the probe to be used in harsh environments. The probe assembly consists of an insertion rod with an element, a hermetically sealed connector, and a ¾" NPT fitting, which are all welded in place. A velocity shield can be provided if required. Several standard elements and lengths are available to meet your specific needs. (Refer to the Element and Alloy Selection Chart for more information).

Specifications:	
Probe Body	316 Stainless Steel
Element Seal	Welded
Fill Material	Ceramic
Temperature Rating	500° F/260° C
Pressure Rating	4000 PSI/277 Bar
Mounting	0.75 inch NPT Fitting

STD. LENGTH
8"
12"
18"

BACK TO ELECTRICAL RESISTANCE MENU
SCROLL DOWN FOR SECOND PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

ER2100 ORDERING INFORMATION

Model							
ER2	Electrical Resistance Fixed Length Pipe Plug Probe						
	Pipe Plug Size						
	2	0.75 inch NPT Pipe Plug					
	3	1 inch NPT Pipe Plug					
		Probe Body Material					
		22	316				
		44	C276				
			E/R Element Options				
			500	CT10 Cylindrical - 10 mil thickness (5 mil useful probe life)			
			600	CT20 Cylindrical - 20 mil thickness (10 mil useful probe life)			
			700	CT50 Cylindrical - 50 mil thickness (25 mil useful probe life)			
				Length			
				06	8.38 inches max. insertion length		
				08	10.38 inches max. insertion length		
				12	14.38 inches max. insertion length		
				18	20.38 inches max. insertion length		
					Element Alloy		
					XXX	Use Code in Alloy Chart	
						E/R Probe Options	
						00	No Shield
						03	Shield
ER2	2	22	500	08	375	03	Example of Probe Ordering #

For alloys, sizes, or other special requirements not listed, contact our sales department.

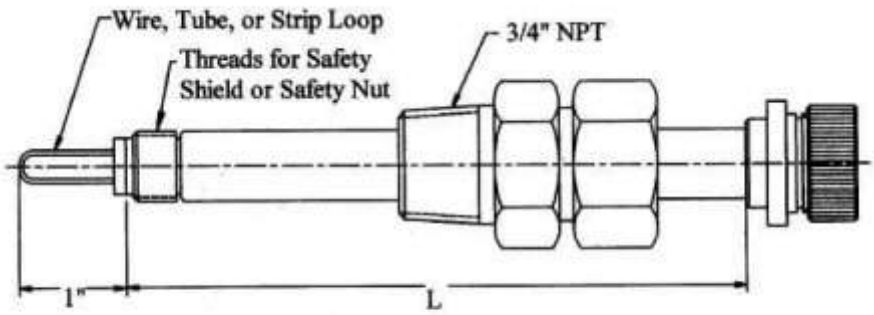
Alloy Chart					
Code	Description	UNS#	Code	Description	UNS#
375	C1010	G10100	159	316L S.S	S31603
538	5Cr ½Mo	K42544	A12	C276	N10276
541	9Cr 1Mo	K90941	602	Alloy 625	N06625
186	410 S.S	S41000	419	CDA110	C11000
141	304 S.S	S30400	434	CDA443	C44300

Note: Not all alloys are available with all element types and seals.

BACK TO ELECTRICAL RESISTANCE MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model ER 3000 Electrical Resistance Probe with Adjustable Length ¾ inch NPT Pipe Plug Mount and Loop Element



All Dimensions in Inches

Model ER3000 Electrical Resistance Probe is an adjustable-insertion-length probe with a ¾" NPT compression fitting. The compression fitting allows the probe to be inserted into the process to the required length. The probe requires process isolation or process shutdown to install and a threaded pipe fitting to mount. The probe consists of an insertion rod with an element, a hermetically sealed connector, a compression fitting and a safety nut to prevent blow out. A velocity shield can be added to the assembly if required. Several standard loop elements and lengths are available to meet your specific needs. (Refer to the Element and Alloy Selection Chart for more information).

Specifications:	
Probe Body	316 Stainless Steel
Element Seal	Glass or Teflon
Fill Material	Ceramic
Temperature Rating	500° F/260° C
Pressure Rating	1500 PSI/102 Bar
Mounting	0.75 inch NPT Fitting

STD. LENGTH
8"
12"
18"

BACK TO ELECTRICAL RESISTANCE MENU
SCROLL DOWN FOR SECOND PAGE

RCSL

ROSE CORROSION SERVICES LIMITED

1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

ER3000 ORDERING INFORMATION

Model								
ER3	Electrical Resistance Adjustable Pipe Plug Probe							
	Pipe Plug Size							
	2	0.75 inch NPT Pipe Plug						
	3	1 inch NPT Pipe Plug						
		Probe Body Material						
		22	316					
		44	C276					
			E/R Element Options					
			00	WR40 Wire Loop - 40 mil thickness (10 mil useful probe life)				
			10	WR80 Wire Loop - 80 mil thickness (20 mil useful probe life)				
			20	TU04 Tube Loop - 4 mil thickness (2 mil useful probe life)				
			30	TU08 Tube Loop - 8 mil thickness (4 mil useful probe life)				
			40	TU16 Tube Loop - 16 mil thickness (8 mil useful probe life)				
			80	SL04 Strip Loop - 4 mil thickness (1 mil useful probe life)				
			90	SL08 Tube Loop - 8 mil thickness (2 mil useful probe life)				
				Seal Type				
				1	Glass			
				2	Teflon			
				3	Epoxy			
					Length			
					06	5.33 inches max. insertion length		
					08	7.33 inches max. insertion length		
					12	11.33 inches max. insertion length		
					18	17.33 inches max. insertion length		
						Element Alloy		
						XXX	Use Code in Alloy Chart	
							E/R Probe Options	
							00	No Shield
							03	Shield
ER3	2	22	10	1	08	375	03	Example of Probe Ordering #

For alloys, sizes, or other special requirements not listed, contact our sales department.

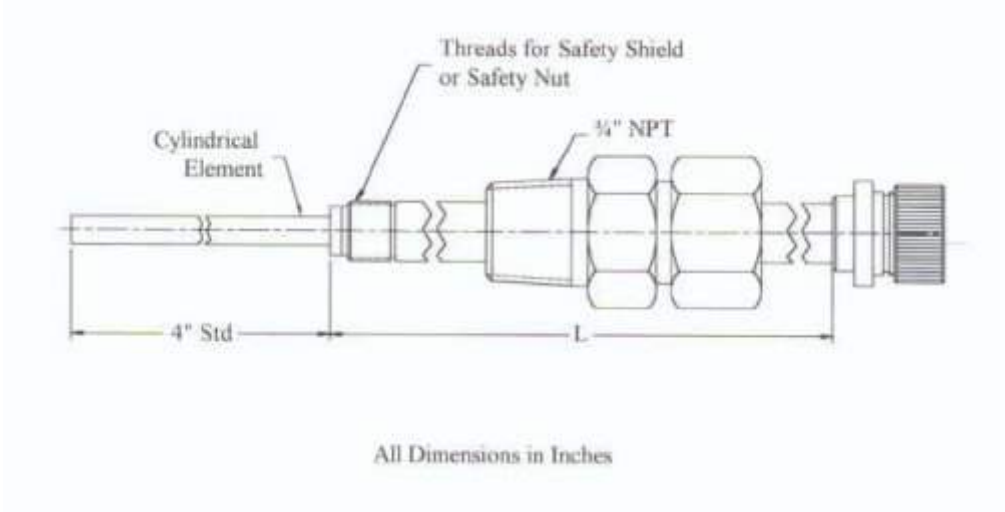
Alloy Chart					
Code	Description	UNS#	Code	Description	UNS#
375	C1010	G10100	159	316L S.S	S31603
538	5Cr 1/2Mo	K42544	A12	C276	N10276
541	9Cr 1Mo	K90941	602	Alloy 625	N06625
186	410 S.S	S41000	419	CDA110	C11000
141	304 S.S	S30400	434	CDA443	C44300

Note: Not all alloys are available with all element types and seals.

BACK TO ELECTRICAL RESISTANCE MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model ER 3100 -Electrical Resistance Probe with Adjustable Length ¾" NPT Pipe Plug Mount and Cylindrical Element



Model ER3100 Electrical Resistance Probe is an adjustable-insertion-length probe with a ¾" NPT compression fitting. The compression fitting allows the probe to be inserted into the process to the required length. The probe requires process isolation or process shutdown to install and a threaded pipe fitting to mount. The all-welded construction allows the probe to be used in harsh environments. The probe assembly consists of an insertion rod with an element, a hermetically sealed connector welded in place, a compression fitting, and a safety nut to prevent blow out. A velocity shield can be added to the assembly if required. Several standard elements and lengths are available to meet your specific needs. (Refer to the Element and Alloy Selection Chart for more information).

Specifications:	
Probe Body	316 Stainless Steel
Element Seal	Welded
Fill Material	Ceramic
Temperature Rating	500° F/260° C
Pressure Rating	1500 PSI/102 Bar
Mounting	0.75 inch NPT Fitting

STD. LENGTH
8"
12"
18"

BACK TO ELECTRICAL RESISTANCE MENU
SCROLL DOWN FOR SECOND PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

ER3100 ORDERING INFORMATION

Model							
ER3	Electrical Resistance Adjustable Pipe Plug Probe						
	Pipe Plug Size						
	2	0.75 inch NPT Pipe Plug					
	3	1 inch NPT Pipe Plug					
		Probe Body Material					
		22	316				
		44	C276				
			E/R Element Options				
			500	CT10 Cylindrical - 10 mil thickness (5 mil useful probe life)			
			600	CT20 Cylindrical - 20 mil thickness (10 mil useful probe life)			
			700	CT50 Cylindrical - 50 mil thickness (25 mil useful probe life)			
				Length			
				06	8.58 inches max. insertion length		
				08	10.58 inches max. insertion length		
				12	14.58 inches max. insertion length		
				18	20.58 inches max. insertion length		
					Element Alloy		
					XXX	Use Code in Alloy Chart	
						E/R Probe Options	
						00	No Shield
						03	Shield
ER3	2	22	500	08	375	03	Example of Probe Ordering #

For alloys, sizes, or other special requirements not listed, contact our sales department.

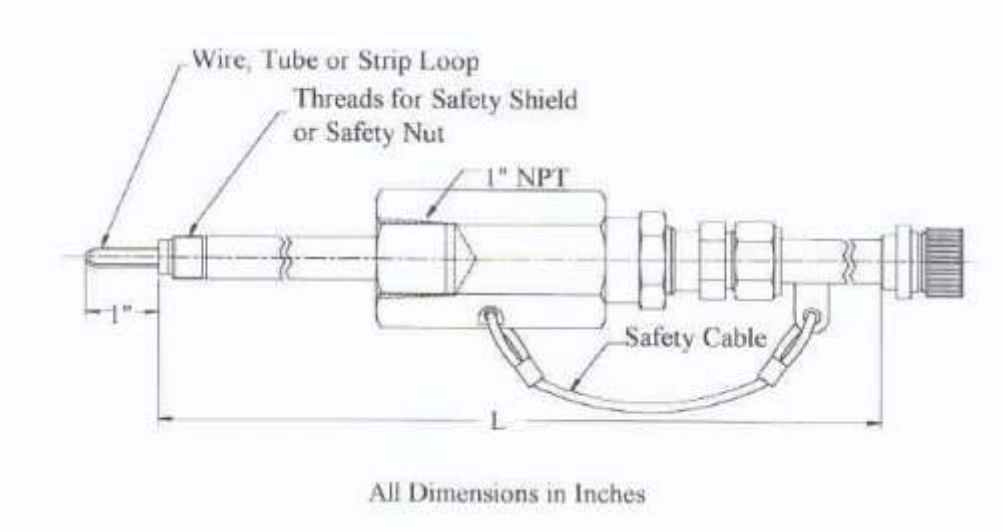
Alloy Chart					
Code	Description	UNS#	Code	Description	UNS#
375	C1010	G10100	159	316L S.S	S31603
538	5Cr 1/2Mo	K42544	A12	C276	N10276
541	9Cr 1Mo	K90941	602	Alloy 625	N06625
186	410 S.S	S41000	419	CDA110	C11000
141	304 S.S	S30400	434	CDA443	C44300

Note: Not all alloys are available with all element types and seals.

BACK TO ELECTRICAL RESISTANCE MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model ER4000 - Electrical Resistance Probe with Packing Gland and Loop Element



Model ER4000 Electrical Resistance Probes are retractable and commonly used in high pressure and high temperature applications. A specially designed packing gland is used with the probe for insertion into or retraction from a pressurized system without a process shutdown. The probe is designed to mount onto a 1" piping system, but can easily be adapted to fit your specific requirements. The probe assembly consists of an insertion rod with an element, a hermetically sealed connector welded in place, and a packing gland. A safety cable and safety nut, are also provided to prevent blowout. A velocity shield can be added to the assembly if required. Standard packing material in the packing gland is Teflon, however, graphoil packing can be provided for high temperature applications. Several standard elements and lengths are available to meet your specific needs. (Refer to the Element and Alloy Selection Chart for more information).

Specifications:	
Probe Body	316 Stainless Steel
Element Seal	Glass or Teflon
Fill Material	Ceramic
Temperature Rating	500° F/260° C
Pressure Rating	1000 PSI/68 Bar
Mounting	1 inch Full Port Valve (Min)

STD. LENGTH	I.L. (max)
18"	10.22"
24"	16.22"
30"	22.22"
36"	28.22"
42"	34.22"

Metal Samples Easy Tool is recommended for probe insertion or retraction in systems with pressure over 150 pounds.

BACK TO ELECTRICAL RESISTANCE MENU
SCROLL DOWN FOR SECOND PAGE

RCSL

ROSE CORROSION SERVICES LIMITED

1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

ER4000 ORDERING INFORMATION

Model								
ER45	Electrical Resistance 1 inch Female NPT Probe with Packing Gland							
ER00	Electrical Resistance Replacement Insertion Rod							
	Probe Body Material							
	2	316						
	4	C276						
		Packing Gland Material						
		0	N/A (replacement insertion rod)					
		2	316					
		4	C276					
			E/R Element Options					
			00	WR40 Wire Loop - 40 mil thickness (10 mil useful probe life)				
			10	WR80 Wire Loop - 80 mil thickness (20 mil useful probe life)				
			20	TU04 Tube Loop - 4 mil thickness (2 mil useful probe life)				
			30	TU08 Tube Loop - 8 mil thickness (4 mil useful probe life)				
			40	TU16 Tube Loop - 16 mil thickness (8 mil useful probe life)				
			80	SL04 Strip Loop - 4 mil thickness (1 mil useful probe life)				
			90	SL08 Strip Loop - 8 mil thickness (2 mil useful probe life)				
				Seal Type				
				1	glass			
				2	Teflon			
				3	Epoxy			
					Length			
					18	11.60 inches max. insertion length		
					24	17.60 inches max. insertion length		
					30	23.60 inches max. insertion length		
					36	29.60 inches max. insertion length		
					42	35.60 inches max. insertion length		
						Element Alloy		
						XXX	Use Code in Alloy Chart	
							E/R Probe Options	
							00	No Shield
							01	Shield, Coupon adapter (118), hardware
							02	Shield, Coupon adapter (220), hardware
							03	Shield
ER45	2	2	10	1	36	375	O2	Example of Probe Ordering #

For alloys, sizes, or other special requirements not listed, contact our sales department.
Safety clamp must be ordered separately.

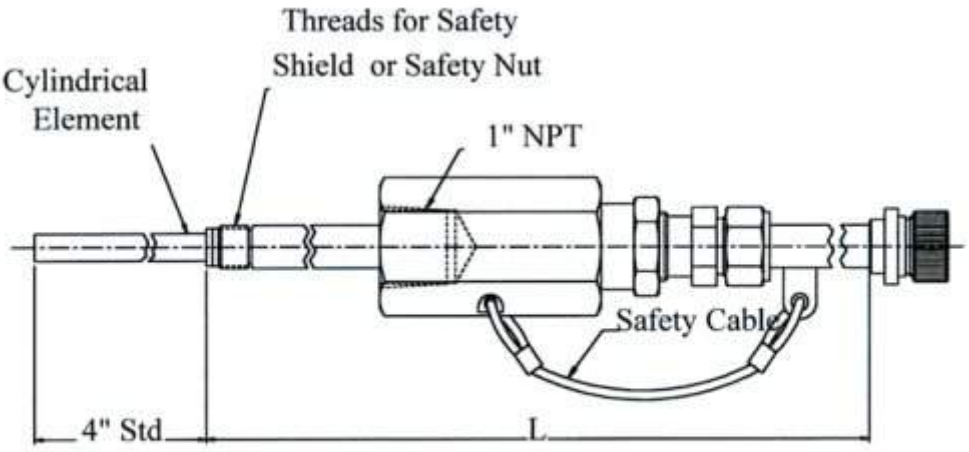
Alloy Chart					
Code	Description	UNS#	Code	Description	UNS#
375	C1010	G10100	159	316L S.S	S31603
538	5Cr ½Mo	K42544	A12	C276	N10276
541	9Cr 1Mo	K90941	602	Alloy 625	N06625
186	410 S.S	S41000	419	CDA110	C11000
141	304 S.S	S30400	434	CDA443	C44300

Note: Not all alloys are available with all element types and seals.

BACK TO ELECTRICAL RESISTANCE MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Models ER 4100 and 4100 HT - Electrical Resistance Probe with Packing Gland and Cylindrical Element



All Dimensions in Inches

Model ER4100 Electrical Resistance Probes are retractable and commonly used in high pressure and high temperature applications. The all-welded design allows the probe to be used in harsh environments. A specially designed packing gland is used with the probe for insertion into or retraction from a pressurized system without a process shutdown. The probe is designed to mount onto a 1" piping system, but can easily be adapted to fit your specific requirements. The probe assembly consists of an insertion rod with an element, a hermetically sealed connector welded in place, and a packing gland. A safety cable and safety nut, are also provided to prevent blowout. A velocity shield can be added to the assembly if required. Standard packing material in the packing gland is Teflon, however, graphoil packing can be provided for high temperature applications. Several standard elements and lengths are available to meet your specific needs. (Refer to the Element and Alloy Selection Chart for more information).

Specifications:	
Probe Body	316 Stainless Steel
Element Seal	Welded
Fill Material	Ceramic
Temperature Rating	500° F/260 ° C. 1200° F/649° C.HT
Pressure Rating	1000psi/Bar
Mounting	1 inch Full Port Valve (Min)

STD. LENGTH	I.L (max)
18”	14.85”
24”	20.85”
30”	26.85”
36”	32.85”
42”	38.85”

Metal Samples Easy Tool is recommended for probe insertion or retraction in systems with pressure over 150 pounds.

BACK TO ELECTRICAL RESISTANCE MENU
SCROLL DOWN FOR SECOND PAGE

RCSL

ROSE CORROSION SERVICES LIMITED

1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

ER4100/ER4100HT ORDERING INFORMATION

Model							
ER45	Electrical Resistance 1 inch Female NPT Probe with Packing Gland						
ER75	Electrical Resistance 1 inch NPT Probe with Packing Gland, High Temperature						
ER00	Electrical Resistance Replacement Insertion Rod						
ER05	Electrical Resistance Replacement Insertion Rod, High Temperature						
	Probe Body Material						
	2	316					
	4	C276					
		Packing Gland Material					
		0	N/A (replacement insertion rod)				
		2	316				
		4	C276				
			E/R Element Options				
			500	CT10 Cylindrical - 10 mil thickness (5 mil useful probe life)			
			600	CT20 Cylindrical - 20 mil thickness (10 mil useful probe life)			
			700	CT50 Cylindrical - 50 mil thickness (25 mil useful probe life)			
				Length			
				18	14.85 inches max. insertion length		
				24	20.85 inches max. insertion length		
				30	26.85 inches max. insertion length		
				36	32.85 inches max. insertion length		
				42	38.85 inches max. insertion length		
					Element Alloy		
					XXX	Use Code in Alloy Chart	
						E/R Probe Options	
						00	No Shield
						01	Shield, Coupon adapter (118), hardware
						02	Shield, Coupon adapter (220), hardware
						03	Shield
ER3	2	2	700	36	375	O2	Example of Probe Ordering #

For alloys, sizes, or other special requirements not listed, contact our sales department.
Safety clamp must be ordered separately.

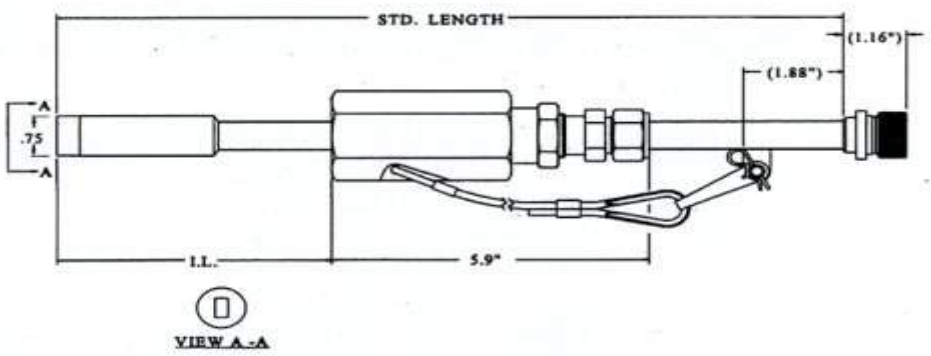
Alloy Chart					
Code	Description	UNS#	Code	Description	UNS#
375	C1010	G10100	159	316L S.S	S31603
538	5Cr 1/2Mo	K42544	A12	C276	N10276
541	9Cr 1Mo	K90941	602	Alloy 625	N06625
186	410 S.S	S41000	419	CDA110	C11000
141	304 S.S	S30400	434	CDA443	C44300

Note: Not all alloys are available with all element types and seals.

BACK TO ELECTRICAL RESISTANCE MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model ER4200 - Electrical Resistance Probe with Packing Gland and Small Flush Element



Model ER4200 is a retractable, flush-mount, electrical resistance probe ideally suited for applications where the probe element needs to be flush with the wall of the pipe. A specially designed packing gland is used with the probe for insertion to or retraction from a pressurised system without a process shutdown. Standard packing material in the packing gland is Teflon, however, graphoil packing can be provided for high temperature applications. The probe is designed to mount into a 1" piping system, but can easily be adapted to fit your specific requirements. The probe consists of an insertion rod with an element, a hermetically sealed connector welded in place and a packing gland. The insertion length (I.L.) is calculated to the end of the element. Probe length can be specified by the customer. For standard probes, the maximum length is given in the chart below. Several standard elements are available to meet your specific needs. (Refer to the Element and Alloy Selection Chart for more information).

Specifications:	
Probe Body	316 Stainless Steel
Element Seal	Glass or Teflon
Fill Material	Epoxy
Temperature Rating	500° F/260° C. - Teflon 1200° F/649° C. - Graphoil
Pressure Rating	150psi/102 Bar
Mounting	1 inch Full Port Valve (Min)

STD. LENGTH	I.L (max)
18"	10.22”
24"	16.22”
30"	22.22”
36"	28.22”
42"	34.22”

Metal Samples Easy Tool is recommended for probe insertion or retraction in systems with pressure over 150 pounds.

BACK TO ELECTRICAL RESISTANCE MENU
SCROLL DOWN FOR SECOND PAGE

RCSL

ROSE CORROSION SERVICES LIMITED

1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

ER4200 ORDERING INFORMATION

Model							
ER45	Electrical Resistance 1 inch Female NPT Probe with Packing Gland						
	Probe Body Material						
	22	316					
	44	C276					
		E/R Element Options					
		A0	FS04 Flush Mount - 4 mil thickness (2 mil useful probe life)				
		B0	FS08 Flush Mount - 8 mil thickness (4 mil useful probe life)				
		H0	FS20 Flush Mount - 20 mil thickness (10 mil useful probe life)				
			Seal Type				
			1	glass			
			3	Epoxy			
				Length			
				18	10.22 inches max. insertion length		
				24	16.22 inches max. insertion length		
				30	22.22 inches max. insertion length		
				36	28.22 inches max. insertion length		
				42	34.22 inches max. insertion length		
					Element Alloy		
					XXX	Use Code in Alloy Chart	
						E/R Probe Options	
						00	
ER45	22	A0	1	36	375	0	Example of Probe Ordering #

For alloys, sizes, or other special requirements not listed, contact our sales department.
Safety clamp must be ordered separately.

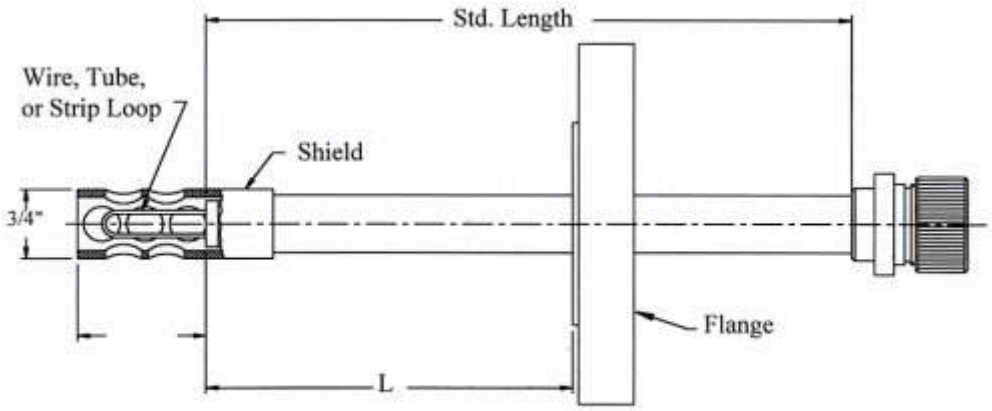
Alloy Chart					
Code	Description	UNS#	Code	Description	UNS#
375	C1010	G10100	159	316L S.S	S31603
538	5Cr 1/2Mo	K42544	A12	C276	N10276
541	9Cr 1Mo	K90941	602	Alloy 625	N06625
186	410 S.S	S41000	419	CDA110	C11000
141	304 S.S	S30400	434	CDA443	C44300

Note: Not all alloys are available with all element types and seals.

BACK TO ELECTRICAL RESISTANCE MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model ER 6000 - Electrical Resistance Probe with Fixed Length Flange and Loop Element



All Dimensions in Inches

Model ER6000 is a fixed-insertion-length, flange-mounted, electrical resistance probe. The probe is ideally suited for use in high pressure and/or hazardous applications where threaded fittings are not available or not recommended. Process shutdown or process isolation is required for installation and inspection. The probe assembly consists of an insertion rod with an element, a hermetically sealed connector, a velocity shield, and a flange (as specified by customer), which are all welded in place. A mechanical seal can be added for additional safety. Several standard elements, lengths, and different flange sizes are available to meet your specific needs. (Refer to the Element and Alloy Selection Chart for more information).

Specifications:	
Probe Body	316 Stainless Steel
Element Seal	Glass or Teflon
Fill Material	Ceramic
Temperature Rating	500° F/260° C
Pressure Rating	According to Flange Rating
Mounting	Mating Flange

STD. LENGTH
8"
12"
18"
24"

BACK TO ELECTRICAL RESISTANCE MENU
SCROLL DOWN FOR SECOND PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

ER6000 ORDERING INFORMATION

Model									
ER6	Electrical Resistance Fixed Length Probe with Flange								
	Flange Size								
	1	1 inch Flange							
	2	1.5 inch Flange							
	3	2 inch Flange							
	4	3 inch Flange							
	5	4 inch Flange							
	6	0.5 inch Flange							
	7	6 inch Flange							
		Probe Body Material							
		22	316						
		44	C276						
			E/R Element Options						
			0	WR40 Wire Loop - 40 mil thickness (10 mil useful probe life)					
			1	WR80 Wire Loop - 80 mil thickness (20 mil useful probe life)					
			2	TU04 Tube Loop - 4 mil thickness (2 mil useful probe life)					
			3	TU08 Tube Loop - 8 mil thickness (4 mil useful probe life)					
			4	TU16 Tube Loop - 16 mil thickness (8 mil useful probe life)					
			8	SL04 Strip Loop - 4 mil thickness (1 mil useful probe life)					
			9	SL08 Strip Loop - 8 mil thickness (2 mil useful probe life)					
				Flange Pressure Rating					
				1	150 lb.				
				2	300 lb.				
				3	600 lb.				
				4	1200 lb.				
				5	1500 lb.				
				6	900 lb.				
					Seal Type				
					1	Glass			
					2	Teflon			
					3	Epoxy			
						Length			
						08	7.33 inches max. insertion length		
						12	11.33 inches max. insertion length		
						18	17.33 inches max. insertion length		
						24	23.33 inches max. insertion length		
							Element Alloy		
							XXX	Use Code in Alloy Chart	
								E/R Probe Options	
								00	No Shield
								01	Shield, coupon adapter (118), hardware
								02	Shield, coupon adapter (220), hardware
								03	Shield
ER6	2	22	4	1	2	O8	375	O3	Example of Probe Ordering #

For alloys, sizes, or other special requirements not listed, contact our sales department.

BACK TO ELECTRICAL RESISTANCE MENU
SCROLL DOWN FOR THIRD PAGE

RCSL

ROSE CORROSION SERVICES LIMITED

1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

ER6000 ORDERING INFORMATION CONTINUED

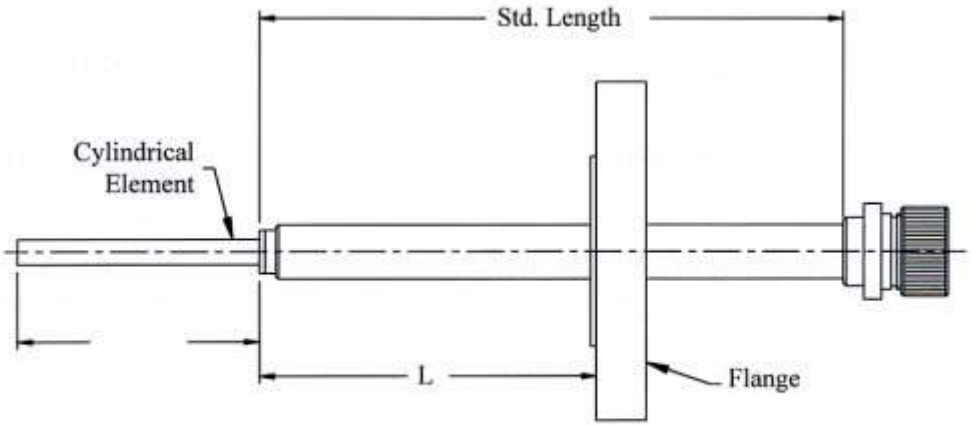
Alloy Chart					
Code	Description	UNS#	Code	Description	UNS#
375	C1010	G10100	159	316L S.S	S31603
538	5Cr ½Mo	K42544	A12	C276	N10276
541	9Cr 1Mo	K90941	602	Alloy 625	N06625
186	410 S.S	S41000	419	CDA110	C11000
141	304 S.S	S30400	434	CDA443	C44300

Note: Not all alloys are available with all element types and seals.

BACK TO ELECTRICAL RESISTANCE MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model ER 6100 - Electrical Resistance Probe with Fixed Length Flange and Cylindrical Element



All Dimensions in Inches

Model ER6100 is a fixed-insertion-length, flange-mounted, electrical resistance probe. The probe is ideally suited for use in high pressure and/or hazardous applications where threaded fittings are not available or not recommended. Process shutdown or process isolation is required to install and inspect. The all-welded construction allows the probe to be used in harsh environments. The probe assembly consists of an insertion rod with an element, a hermetically sealed connector, and a flange (as specified by customer), which are all welded in place. A mechanical seal can be added for additional safety. Several standard elements, lengths, and different flange sizes are available to meet your specific needs. (Refer to the Element and Alloy Selection Chart for more information).

Specifications:	
Probe Body	316 Stainless Steel
Element Seal	Welded
Fill Material	Ceramic
Temperature Rating	500° F/260° C
Pressure Rating	According to Flange Rating
Mounting	Mating Flange

STD. LENGTH
8"
12"
18"
24"

BACK TO ELECTRICAL RESISTANCE MENU
SCROLL DOWN FOR SECOND PAGE

RCSL

ROSE CORROSION SERVICES LIMITED

1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

ER6100 ORDERING INFORMATION

Model								
ER6	Electrical Resistance Fixed Length Probe with Flange							
	Flange Size							
	1	1 inch Flange						
	2	1.5 inch Flange						
	3	2 inch Flange						
	4	3 inch Flange						
	5	4 inch Flange						
	6	0.5 inch Flange						
	7	6 inch Flange						
		Probe Body Material						
		22	316					
		44	C276					
			E/R Element Options					
			5	CT10 Cylindrical - 10 mil thickness (5 mil useful probe life)				
			6	CT20 Cylindrical - 20 mil thickness (10 mil useful probe life)				
			7	CT50 Cylindrical - 50 mil thickness (25 mil useful probe life)				
				Flange Pressure Rating				
				10	150 lb.			
				20	300 lb.			
				30	600 lb.			
				40	1200 lb.			
				50	1500 lb.			
				60	900 lb.			
					Length			
					08	10.58 inches max. insertion length		
					12	14.58 inches max. insertion length		
					18	20.58 inches max. insertion length		
					24	26.58 inches max. insertion length		
						Element Alloy		
						XXX	Use Code in Alloy Chart	
							E/R Probe Options	
							00	No Shield
							01	Shield, coupon adapter (118), hardware
							02	Shield, coupon adapter (220), hardware
							03	Shield
ER6	2	22	7	20	O8	375	O3	Example of Probe Ordering #

For alloys, sizes, or other special requirements not listed, contact our sales department.

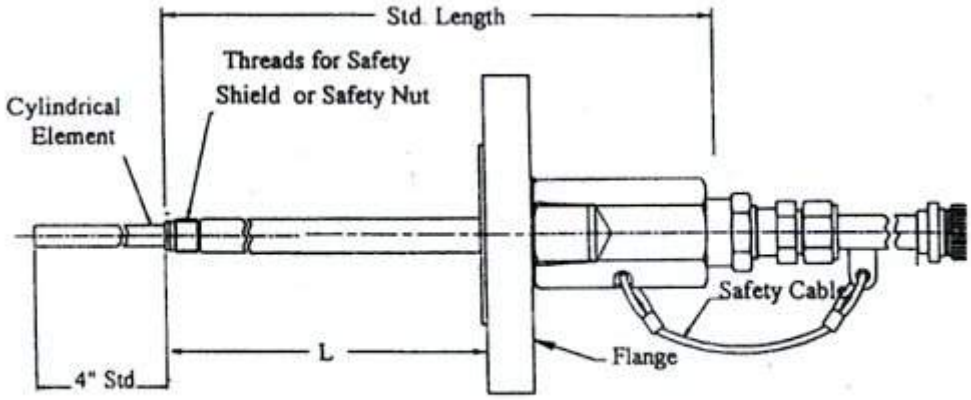
Alloy Chart					
Code	Description	UNS#	Code	Description	UNS#
375	C1010	G10100	159	316L S.S	S31603
538	5Cr 1/2Mo	K42544	A12	C276	N10276
541	9Cr 1Mo	K90941	602	Alloy 625	N06625
186	410 S.S	S41000	419	CDA110	C11000
141	304 S.S	S30400	434	CDA443	C44300

Note: Not all alloys are available with all element types and seals.

BACK TO ELECTRICAL RESISTANCE MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model ER 6104 - Electrical Resistance Probe with Packing Gland Flange and Cylindrical Element



All Dimensions in Inches

Model ER6104 is a retractable length, flange-mounted, electrical resistance probe. The probe is ideally suited for use in high pressure and/or hazardous applications where threaded fittings are not available. A specially designed packing gland is used with the probe for insertion into or retraction from a pressurised system without a process shutdown. The probe is designed to mount onto a 1" piping system, but can easily be adapted to fit your specific requirements. The probe assembly consists of an insertion rod with an element, a hermetically sealed connector welded in place, and a packing gland. A safety cable and safety nut, are also provided to prevent blowout. A velocity shield can be added to the assembly if required. Standard packing material in the packing gland is Teflon, however, graphoil packing can be provided for high temperature applications. Several standard elements and lengths are available to meet your specific needs. (Refer to the Element and Alloy Selection Chart for more information).

Specifications:	
Probe Body	316 Stainless Steel
Element Seal	Welded
Fill Material	Ceramic
Temperature Rating	500° F/260° C
Pressure Rating	According to Flange Rating
Mounting	Mating Flange

STD. LENGTH
18"
24"
30"
36"

BACK TO ELECTRICAL RESISTANCE MENU
SCROLL DOWN FOR SECOND PAGE

RCSL

ROSE CORROSION SERVICES LIMITED

1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

ER6104 ORDERING INFORMATION

Model								
ER6	Electrical Resistance Fixed Length Probe with Flange with Packing Gland							
	Flange Size							
	1	1 inch Flange						
	2	1.5 inch Flange						
	3	2 inch Flange						
	4	3 inch Flange						
	5	4 inch Flange						
	6	0.5 inch Flange						
	7	6 inch Flange						
		Probe Body Material						
		22	316					
		44	C276					
			E/R Element Options					
			5	CT10 Cylindrical - 10 mil thickness (5 mil useful probe life)				
			6	CT20 Cylindrical - 20 mil thickness (10 mil useful probe life)				
			7	CT50 Cylindrical - 50 mil thickness (25 mil useful probe life)				
				Flange Pressure Rating				
				10	150 lb.			
				20	300 lb.			
				30	600 lb.			
				40	1200 lb.			
				50	1500 lb.			
				60	900 lb.			
					Length			
					18	14.85 inches max. insertion length		
					24	20.85 inches max. insertion length		
					30	26.85 inches max. insertion length		
					36	32.85 inches max. insertion length		
						Element Alloy		
						XXX	Use Code in Alloy Chart	
							E/R Probe Options	
							00	No Shield
							01	Shield, coupon adapter (118), hardware
							02	Shield, coupon adapter (220), hardware
							03	Shield
ER6	2	22	7	20	O8	375	O3	Example of Probe Ordering #

For alloys, sizes, or other special requirements not listed, contact our sales department.

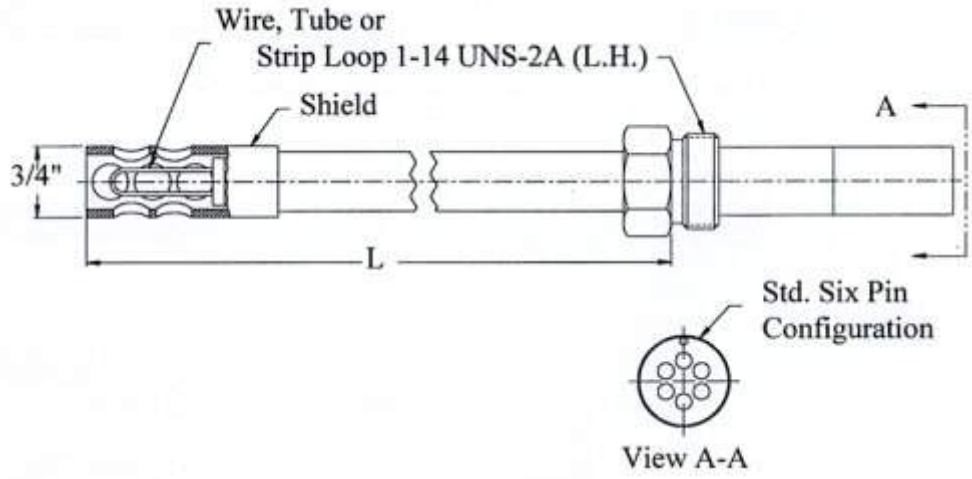
Alloy Chart					
Code	Description	UNS#	Code	Description	UNS#
375	C1010	G10100	159	316L S.S	S31603
538	5Cr 1/2Mo	K42544	A12	C276	N10276
541	9Cr 1Mo	K90941	602	Alloy 625	N06625
186	410 S.S	S41000	419	CDA110	C11000
141	304 S.S	S30400	434	CDA443	C44300

Note: Not all alloys are available with all element types and seals.

BACK TO ELECTRICAL RESISTANCE MENU

ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model ER 7000 - Electrical Resistance Probe for the 2 inch Access System with Loop Element



Model ER7000 Electrical Resistance Probe is a fixed-length probe for use with the 2" access systems at high pressure and temperatures. The probe assembly consists of an insertion rod with an element, a hermetically sealed connector, a hollow plug nut, and a velocity shield, which are all welded in place. The hollow plug nut on the probe screws into the hollow plug of the access system. This allows the probe to be installed in the process, using a retriever tool and service valve, without process shutdown. Several standard element and probe lengths are available to meet your specific needs. Probe adaptors are available and must be ordered separately. (Refer to the Element and Alloy Selection Chart for more information).

Specifications:	
Probe Body	316 Stainless Steel
Element Seal	Glass or Teflon
Fill Material	Ceramic
Temperature Rating	500 ° F / 260 ° C
Pressure Rating	3600 PSI/245 Bar
Mounting	2 inch Access System with Hollow Plug

BACK TO ELECTRICAL RESISTANCE MENU
SCROLL DOWN FOR SECOND PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

ER7000 ORDERING INFORMATION

Model								
HR	Electrical Resistance Probe for High Pressure (HPTM and MHTM) Access Systems							
	Mounting Material							
	2	316						
	3	C276						
		Connector Type						
		1	Small Connector					
		2	Standard Connector					
			E/R Element Options					
			0	WR40 Wire Loop - 40 mil thickness (10 mil useful probe life)				
			1	WR80 Wire Loop - 80 mil thickness (20 mil useful probe life)				
			2	TU04 Tube Loop - 4 mil thickness (2 mil useful probe life)				
			3	TU08 Tube Loop - 8 mil thickness (8 mil useful probe life)				
			4	TU16 Tube Loop - 16 mil thickness (8 mil useful probe life)				
				Seal Type				
				1	Glass			
				2	Teflon			
				3	Epoxy			
					Length			
					XXXX	Length in inches, stated in 2 decimal place format (Ex:7.25 inches=0725)		
						Element Alloy		
						XXX	Use Code in Alloy Chart	
							E/R Probe Options	
							00	No Shield
							01	Standard Shield
							02	Hi-velocity Shield
							03	Coupon Holding Shield
HR	2	2	4	1	O725	375	O3	Example of Probe Ordering #

For alloys, sizes, or other special requirements not listed, contact our sales department.

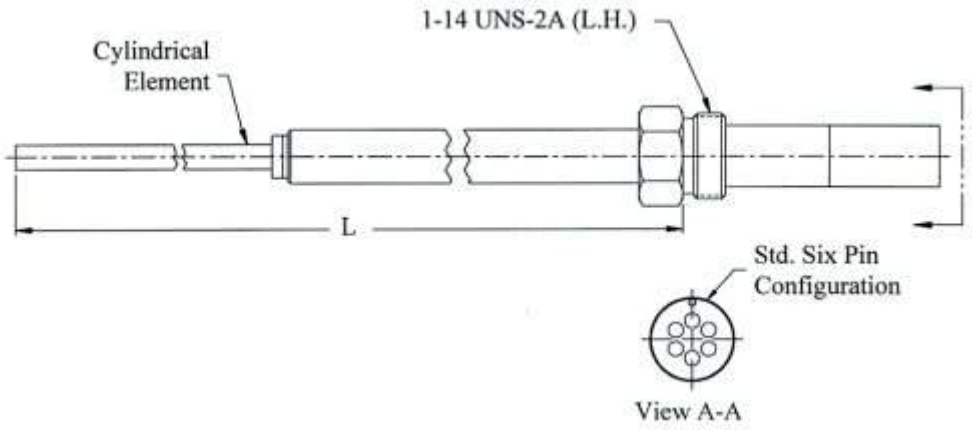
Alloy Chart					
Code	Description	UNS#	Code	Description	UNS#
375	C1010	G10100	159	316L S.S	S31603
538	5Cr ½Mo	K42544	A12	C276	N10276
541	9Cr 1Mo	K90941	602	Alloy 625	N06625
186	410 S.S	S41000	419	CDA110	C11000
141	304 S.S	S30400	434	CDA443	C44300

Note: Not all alloys are available with all element types and seals.

BACK TO ELECTRICAL RESISTANCE MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model ER 7100 - Electrical Resistance Probe for the 2 inch Access System with Cylindrical Element



Model ER7100 Electrical Resistance Probe is a fixed-length probe for use with the 2" access system in high pressure and high temperature applications. The all-welded construction of the element makes it ideal for harsh environments. The probe assembly consists of an insertion rod with an element, a hermetically sealed connector, and a hollow plug nut, which are all welded in place. A velocity shield can be added to the assembly if required. The hollow plug nut on the probe screws into the hollow plug of the access system. This allows the probe to be installed in the process, using a retriever tool and service valve, without process shutdown. Several standard elements and probe lengths are available to meet your specific needs. Probe adaptors are available and must be ordered separately. (Refer to the Element and Alloy Selection Chart for more information).

Specifications:	
Probe Body	316 Stainless Steel
Element Seal	Welded
Fill Material	Ceramic
Temperature Rating	500° F/260° C
Pressure Rating	3600psi/245 Bar
Mounting	2 inch Access System with Hollow Plug

BACK TO ELECTRICAL RESISTANCE MENU
SCROLL DOWN FOR SECOND PAGE

ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

ER7100 ORDERING INFORMATION

Model							
HR	Electrical Resistance Probe for High Pressure (HPTM and MHTM) Access Systems						
	Mounting Material						
	2	316					
	3	C276					
	4	Duplex 2205					
		Connector Type					
		1	Small Connector				
		2	Standard Connector				
			E/R Element Options				
			50	CT10 Cylindrical - 10 mil thickness (5 mil useful probe life)			
			60	CT20 Cylindrical - 20 mil thickness (10 mil useful probe life)			
			70	CT50 Cylindrical - 50 mil thickness (25 mil useful probe life)			
			JO	CT 10 Cylindrical (2”) - 10 mil thickness (5 mil useful probe life)			
				Length			
				XXXX	Length in inches, stated in 2 decimal place format (Ex:6.25 inches = 0625)		
					Element Alloy		
					XXX	Use Code in Alloy Chart	
						E/R Probe Options	
						00	No Shield
						01	Standard Shield
						02	Hi-velocity Shield
						03	Coupon Holding Shield
HR	2	2	60	O725	375	O3	Example of Probe Ordering #

For alloys, sizes, or other special requirements not listed, contact our sales department.

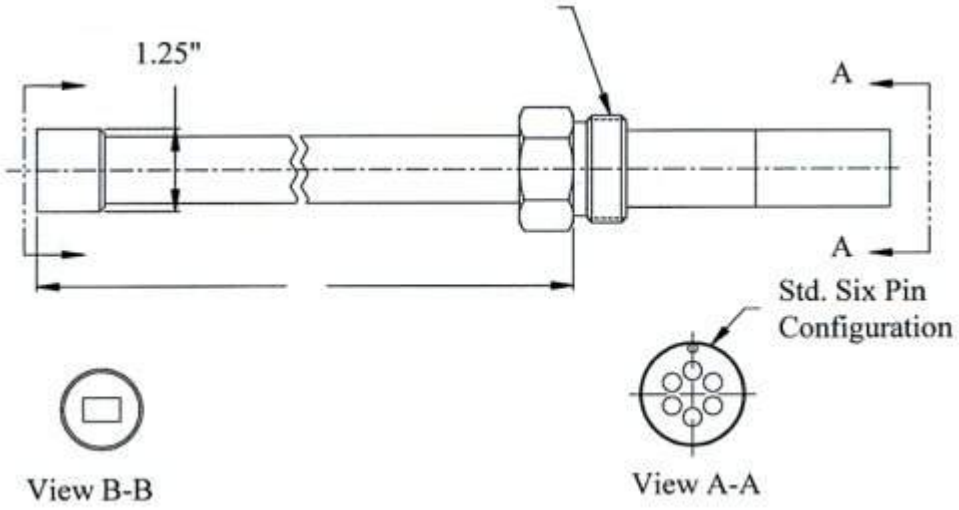
Alloy Chart					
Code	Description	UNS#	Code	Description	UNS#
375	C1010	G10100	159	316L S.S	S31603
538	5Cr ½Mo	K42544	A12	C276	N10276
541	9Cr 1Mo	K90941	602	Alloy 625	N06625
186	410 S.S	S41000	419	CDA110	C11000
141	304 S.S	S30400	434	CDA443	C44300

Note: Not all alloys are available with all element types and seals.

BACK TO ELECTRICAL RESISTANCE MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model ER 7200 - Electrical Resistance Probe
for the 2 inch Access System with Flush Element



Model ER7200 Flush-Mount, Electrical Resistance Probe is a fixed-length probe for use with the 2" access system in high pressure and high temperature applications. These probes are ideally suited for applications where the probe element needs to be flush with the wall of the pipe. The probe assembly consists of an insertion rod with an element, a hermetically sealed connector, and a hollow plug nut, which are all welded in place. The hollow plug nut on the probe screws into the hollow plug of the access system. This allows the probe to be installed in the process, using a retriever tool and service valve, without process shutdown. Insertion lengths range from 1.25" to 36" in 1/16" increments. Several standard elements are available to meet your specific needs. Probe adaptors are available and must be ordered separately. (Refer to the Element and Alloy Selection Chart for more information).

Specifications:	
Probe Body	316 Stainless Steel
Element Seal	Glass or Epoxy
Fill Material	Epoxy
Temperature Rating	500° F/260° C
Pressure Rating	3600psi/245 Bar
Mounting	2 inch Access System

BACK TO ELECTRICAL RESISTANCE MENU
SCROLL DOWN FOR SECOND PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

ER7200 ORDERING INFORMATION

Model								
HR	Electrical Resistance Probe for High Pressure (HPTM and MHTM) Access Systems							
	Mounting Material							
	2	316						
	3	C276						
		Connector Type						
		1	Small Connector					
		2	Standard Connector					
			E/R Element Options					
			A	S4 Flush Mount - 4 mil thickness (2 mil useful probe life)				
			B	S8 Flush Mount - 8 mil thickness (4 mil useful probe life)				
			H	S20 Flush Mount - 20 mil thickness (10 mil useful probe life)				
				Seal Type				
				1	Glass			
				3	Epoxy			
					Length			
					XXXX	Length in inches, stated in 2 decimal place format (Ex:7.25 inches = 0725)		
						Element Alloy		
						XXX	Use Code in Alloy Chart	
							E/R Probe Options	
							0	No Shield
HR	2	2	B	3	O725	375	OO	Example of Probe Ordering #

For alloys, sizes, or other special requirements not listed, contact our sales department.

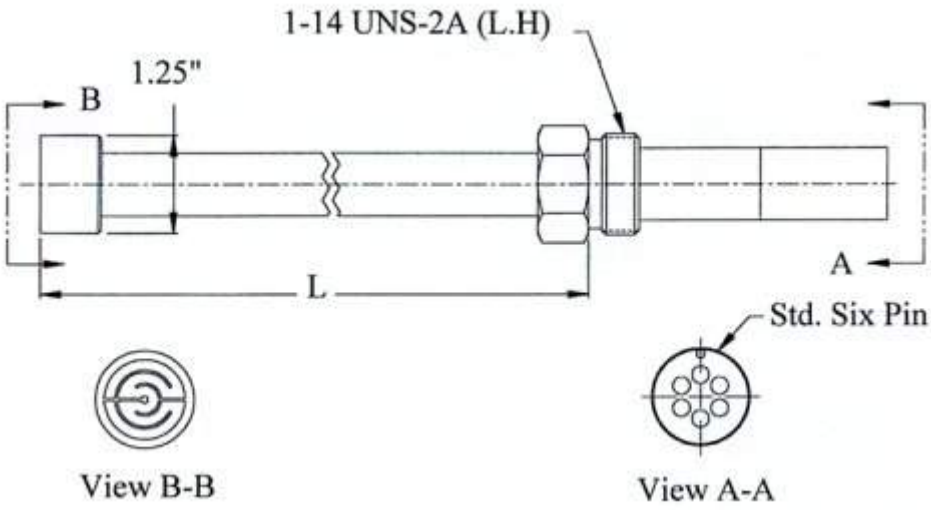
Alloy Chart					
Code	Description	UNS#	Code	Description	UNS#
375	C1010	G10100	159	316L S.S	S31603
538	5Cr ½Mo	K42544	A12	C276	N10276
541	9Cr 1Mo	K90941	602	Alloy 625	N06625
186	410 S.S	S41000	419	CDA110	C11000
141	304 S.S	S30400	434	CDA443	C44300

Note: Not all alloys are available with all element types and seals.

BACK TO ELECTRICAL RESISTANCE MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model ER 7210 - Electrical Resistance Probe for the 2 inch Access System with Large Flush Element



Model ER7210 Flush-Mount Electrical Resistance Probe is a fixed-length probe for use with the 2" access system in high pressure and high temperature applications. These probes are ideally suited for applications where the probe element needs to be flush with the wall of the pipe. The probe assembly consists of an insertion rod with an element, a hermetically sealed connector, and a hollow plug nut, which are all welded in place. The hollow plug nut on the probe screws into the hollow plug of the access system. This allows the probe to be installed in the process, using a retriever tool and service valve, without process shutdown. Insertion lengths range from 1.25" to 36" in 1/16" increments. Several standard elements are available to meet your specific needs. Probe adaptors are available and must be ordered separately. (Refer to the Element and Alloy Selection Chart for more information).

Specifications:	
Probe Body	316 Stainless Steel
Element Seal	Epoxy
Fill Material	Epoxy
Temperature Rating	500° F/260° C
Pressure Rating	3600psi/245 Bar
Mounting	2 inch Access System

BACK TO ELECTRICAL RESISTANCE MENU
SCROLL DOWN FOR SECOND PAGE

RCSL

ROSE CORROSION SERVICES LIMITED

1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

ER7210 ORDERING INFORMATION

Model							
HR	Electrical Resistance Probe for use with MS3600 2 inch Access Systems						
	Mounting Material						
	2	316					
	3	C276					
		Connector Type					
		1	Small Connector				
		2	Standard Connector				
			E/R Element Options				
			C3	S05 Flush Mount - 5 mil thickness (2.5 mil useful probe life)			
			D3	S10 Flush Mount - 10 mil thickness (5 mil useful probe life)			
			E3	S20 Flush Mount - 20 mil thickness (10 mil useful probe life)			
			F3	S40 Flush Mount - 40 mil thickness (20 mil useful probe life)			
				Length			
				XXXX	Length in inches, stated in 2 decimal place format (Ex:7.25 inches=0725)		
					Element Alloy		
					XXX	Use Code in Alloy Chart	
						E/R Probe Options	
						0	No Shield
HR	2	2	C3	O725	375	OO	Example of Probe Ordering #

For alloys, sizes, or other special requirements not listed, contact our sales department.

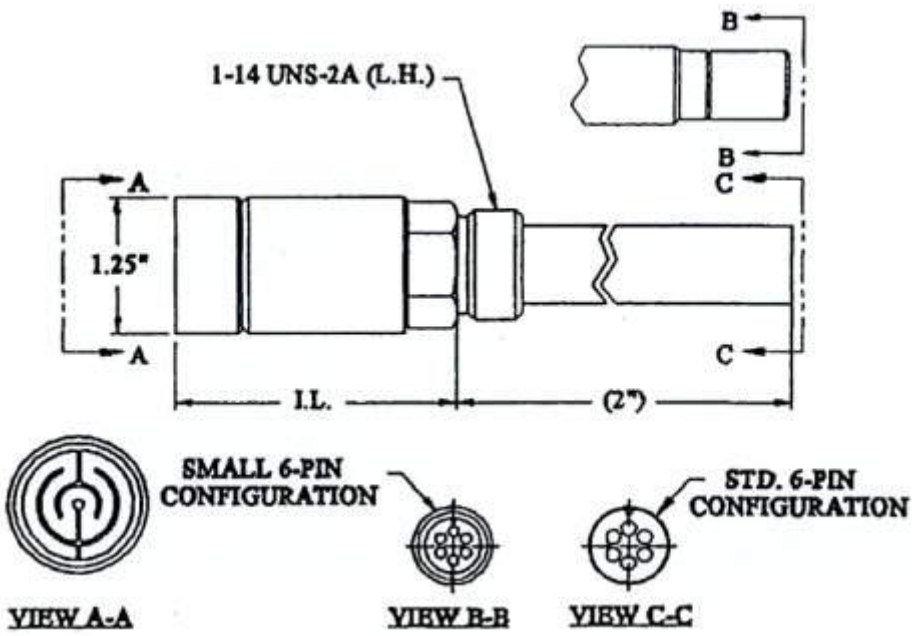
Alloy Chart					
Code	Description	UNS#	Code	Description	UNS#
375	C1010	G10100	159	316L S.S	S31603
538	5Cr 1/2Mo	K42544	A12	C276	N10276
541	9Cr 1Mo	K90941	602	Alloy 625	N06625
186	410 S.S	S41000	419	CDA110	C11000
141	304 S.S	S30400	434	CDA443	C44300

Note: Not all alloys are available with all element types and seals.

BACK TO ELECTRICAL RESISTANCE MENU

ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model ER 7220 - Electrical Resistance Probe for the 2 inch Access System with Large Flush Element



Model ER7220 Flush-Mount Electrical Resistance Probe is an adjustable-length probe for use with the 2" access system in high pressure and high temperature applications. These probes are ideally suited for applications where the probe element needs to be flush with the wall of the pipe. The probe assembly consists of an insertion rod with an element, a hermetically sealed connector, and a hollow plug nut, which are all welded in place. The hollow plug nut on the probe screws into the hollow plug of the access system. This allows the probe to be installed in the process, using a retriever tool and service valve, without process shutdown. Insertion lengths range from 1.687" up to 36" in 1/16" increments. Several standard elements are available to meet your specific needs. Probe adaptors are available and must be ordered separately. (Refer to the Element and Alloy Selection Chart for more information).

Specifications:	
Probe Body	316 Stainless Steel
Element Seal	Epoxy
Fill Material	Epoxy
Temperature Rating	500 ° F / 260 ° C
Pressure Rating	6049psi/420 Bar
Mounting	2 inch Access System

BACK TO ELECTRICAL RESISTANCE MENU
SCROLL DOWN FOR SECOND PAGE

RCSL

ROSE CORROSION SERVICES LIMITED

1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

ER7220 ORDERING INFORMATION

Model							
HR	Electrical Resistance Probe for High Pressure (HPTM and MHTM) Access Systems						
	Mounting Material						
	2	316					
	3	C276					
		Connector Type					
		1	Small Connector				
		2	Standard Connector				
			E/R Element Options				
			C3	S05 Flush Mount - 5 mil thickness (2.5 mil useful probe life)			
			D3	S10 Flush Mount - 10 mil thickness (5 mil useful probe life)			
			E3	S20 Flush Mount - 20 mil thickness (10 mil useful probe life)			
			F3	S40 Flush Mount - 40 mil thickness (20 mil useful probe life)			
				Length			
				XXXX	Length in inches, stated in 2 decimal place format (Ex:7.25 inches=0725)		
					Element Alloy		
					XXX	Use Code in Alloy Chart	
						E/R Probe Options	
						AD	No Shield, Adjustable
HR	2	2	C3	725	375	AD	Example of Probe Ordering #

For alloys, sizes, or other special requirements not listed, contact our sales department.

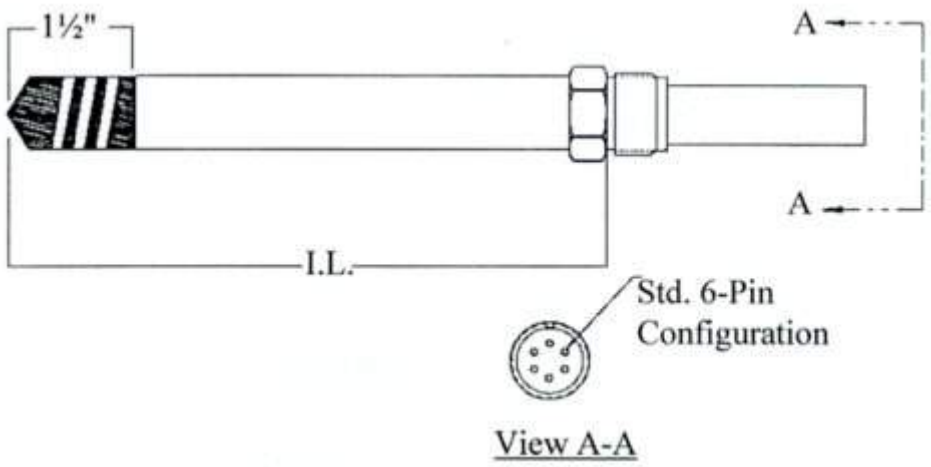
Alloy Chart					
Code	Description	UNS#	Code	Description	UNS#
375	C1010	G10100	159	316L S.S	S31603
538	5Cr ½Mo	K42544	A12	C276	N10276
541	9Cr 1Mo	K90941	602	Alloy 625	N06625
186	410 S.S	S41000	419	CDA110	C11000
141	304 S.S	S30400	434	CDA443	C44300

Note: Not all alloys are available with all element types and seals.

BACK TO ELECTRICAL RESISTANCE MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model ER 7300 - Electrical Resistance Probe, Retrievable Spiral Loop for Two Inch High Pressure Access Systems



Model ER7300 spiral loop probe is retrievable, electrical resistance probe designed for use with two inch high pressure access systems. The element is a spiral wound strip encased in epoxy. This approach to element construction offers several advantages over other element geometries:

- High intrinsic resistance - provides highly stable readings with low susceptibility to noise.
- High element strength - allows use in very high flow rate regimes such as a gas transmission.
- Wide spacing of element loops - minimizes the risk of iron sulphide scaling and bridging.

While the spiral loop probe is ideally suited to fast flowing, sour systems, its high stability makes it a suitable choice for oil and gas systems.

Insertion length (I.L.) is specified by the customer, using the formula:

I.L. = PD + WT + 1.75"
(where PD = penetration depth, WT = wall thickness)

Note: Formula valid for access fitting heights of 5.25" (HP) and 5.5 (MH)

Specifications:	
Probe Body	316L Stainless Steel
Element Seal	Epoxy
Element Material	AISI 1018
Temperature Rating	250° F/121° C
Pressure Rating	3600psi/245 Bar

BACK TO ELECTRICAL RESISTANCE MENU
SCROLL DOWN FOR SECOND PAGE

RCSL

ROSE CORROSION SERVICES LIMITED

1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

ER7300 ORDERING INFORMATION

Model							
HR	Electrical Resistance Probe for High Pressure (HPTM and MHTM Access Systems						
	Mounting Material and Connector Type						
	22	316 stainless steel with standard connector					
		E/R Element Options					
		K	SP10 Spiral Loop - 10 mil thickness (5 mil useful probe life)				
		L	SP20 Spiral Loop - 20 mil thickness (10 mil useful probe life)				
			Seal Type				
			3	Epoxy			
				Length			
				XXXX	Length in inches, stated in 2 decimal place format (Ex:7.25 inches=0725)		
					Element Alloy		
					XXX	Use Code in Alloy Chart	
						E/R Probe Options	
						00	No Shield
HR	22	K	3	725	375	OO	Example of Probe Ordering #

For alloys, sizes, or other special requirements not listed, contact our sales department.

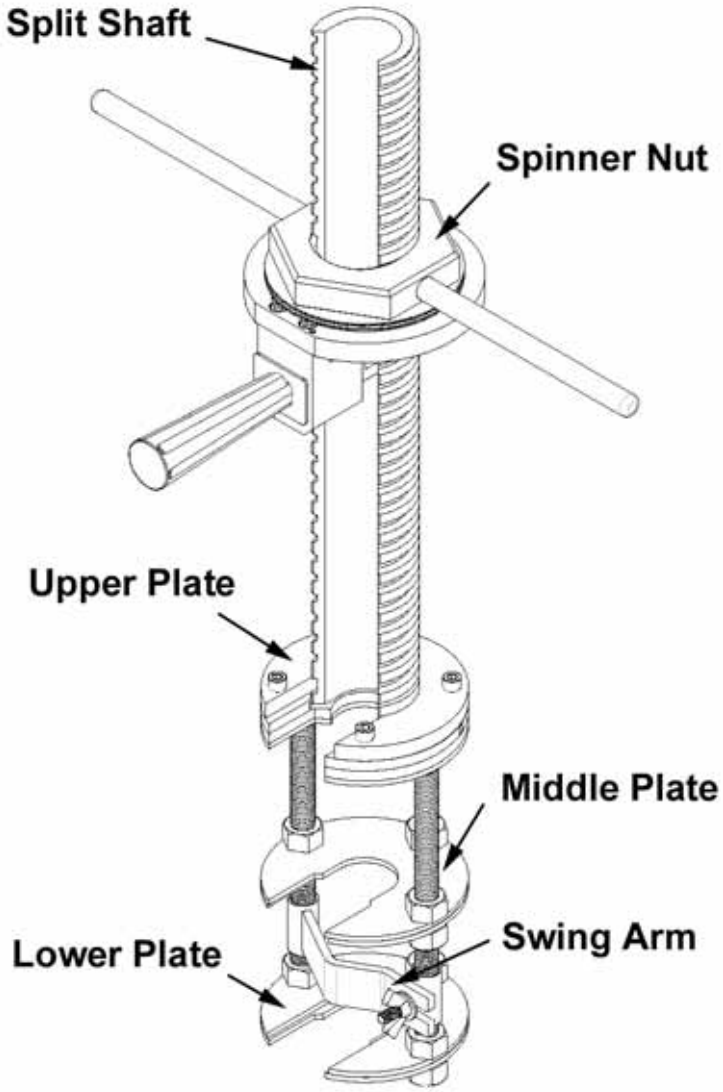
Alloy Chart					
Code	Description	UNS#	Code	Description	UNS#
375	C1010	G10100	159	316L S.S	S31603
538	5Cr ½Mo	K42544	A12	C276	N10276
541	9Cr 1Mo	K90941	602	Alloy 625	N06625
186	410 S.S	S41000	419	CDA110	C11000
141	304 S.S	S30400	434	CDA443	C44300

Note: Not all alloys are available with all element types and seals.

BACK TO ELECTRICAL RESISTANCE MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

EASY TOOL RETRACTING SYSTEMS



The**Easy Tool Retracting System** is used for inserting and retracting probes and coupon holder assemblies in pressure applications. Metal Samples **Easy Tool** is strongly recommended for systems with pressure over 150 pounds. The tool's design enables easy insertion to any depth you require.

The **Easy Tool** weighs under 15 pounds and is available in 32" and 44" sizes. The tool is one of the lightest, shortest retracting tools available on the market.

Easy Tool can be used with most packing glands available in the industry.

BACK TO ELECTRICAL RESISTANCE MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

MODEL 600

The Rose **Model 600** Access Valve Assemblies are designed to allow access to pressurised areas without process shutdown.

The assembly consists of a Thredolet, all thread nipple, ball valve and a 5" Packing Gland interjoint nipple. NOTE: The 5" nipple is used as standard, and is suitable for all probe elements except coupon holding shields which require a 9" nipple. The full port valve is provided in either carbon steel or 316 Stainless Steel body, with Polyfill seats and Viton body seals. All items comply with NACE standard MR0175, for materials resistant to sulfide stress cracking. Flanged Outlets to connect with a pipeline or vessel mating flange are available.

The **Model 600** Access Valve Assembly accommodates all ROSE retractable probes. This includes Electrical Resistance, Linear Polarisation Resistance, Coupon Holder, Injection Tubes and Nozzles, Hydrogen, Sand and Galvanic Probes.

ORDERING INFORMATION

Thredolet Outlet/ C.S. Access Valve with St St Trim - P.N. 700990

BACK TO ELECTRICAL RESISTANCE MENU

ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

SYSTEM ACCESSORIES

CABLES

Factory Assembled: For Portable Instrument Series P.N 700716 + Length
For Transmitter and Data Collection Systems P.N. 700726 + Length

Cable - Heavy Duty: P.N 700331
Two wire for transmitter P.N. 700431

Connectors: Low Pressure Probe Type A P.N. 700521 2" System High Pressure Type B P.N. 700343

Probe to Cable Adaptor for 2" High Pressure System

Portable with Standard 6 pin Connector P.N. 700319
Portable with Small 6pin ConnectorFixed P.N. 700033
Fixed Adapter with Standard 6 pin Connector P.N. 700640
Fixed Adaptor with Small 6pin Connector P.N. 700077

Shield Options

Standard Shield - Wire Loop Probe - P.N. 700608
High Velocity Shield - Wire Loop Probe - P.N. 700609
Standard Shield - Cylindrical Probe - P.N. 700610
High Velocity Shield - Cylindrical Probe - P.N. 700611

Coupon Holder Shield - Wire Loop Probe - P.N. 700612
Coupon Holder Shield - Cylindrical Probe - P.N. 700613

SAFETY CLAMPS

For 18" and 24" Probe lengths P.N. 700700
For 30", 36" and 42" Probe lengths P.N. 700701

BACK TO ELECTRICAL RESISTANCE MENU

ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE +44(0)1635 552225 FAX: +44(0)1635 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

MS1500L

The**MS1500L** is a hand-held, battery-powered corrosion meter used with linear polarisation resistance (LPR) and galvanic probes provide both measurements and data collection. The unit is lightweight so that it can be easily carried to any location where measuring or data collecting is required.

MEASUREMENT
Measurement functions of the unit include:

- Corrosion rate for 2-electrode LPR probe
- Corrosion rate for 3-electrode LPR probe
- "Pitting Index"
- Zero Resistance Ammetry
- Electrode Potential

Using galvanic probes with an appropriate combination of corroding, redox and reference electrodes, the can measure the corrosion potential of a corroding electrode, or the redox potential of the process fluid, witch provides a wide range of information on such phenomena as active/passive transitions, inhibitor film persistency, inhibitor mechanisms, cathodic protection criteria, as well as providing an alternative means to

BACK TO LINEAR POLARISATION MENU
SCROLL DOWN FOR SECOND PAGE

measure the onset of pitting attacks, crevice attacks, and conjoint action failure phenomena (stress cracking).

DATA COLLECTION

A total of 3000 readings can be stored in the **MS1500's** onboard memory that will hold readings from up to 100 individual probes. Stored data may be called to the instrument screen and reviewed at any time. Backup batteries will hold all data stored in the memory for up to 12 months, in the event of failure of the main instrument batteries.

Data may be selectively deleted from the memory to accommodate additional information once the 3000 reading capacity is reached. Alternatively, information my be downloaded to an IBM compatible PC as a comma delimited ASCII file for import into any of the standard data handling and analysis programs (e.g., EXCEL â , LOTUS 123 â , Quattro Pro â).

The **MS1500L** may also be used as a data collection and transfer terminal for the **MS3500L** remote data logger. Accumulated data from several **MS3500L** field-based units may be locally downloaded to the **MS1500L** hand-held terminal and then transferred to an IBM compatible PC for further analysis.

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE +44(0)1635 552225 FAX: +44(0)1635 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

TECHNICAL SPECIFICATIONS

Functions:	Corrosion Rate (MPY): Three electrode measurement Corrosion Rate (MPY): Two electrode measurement Galvanic Current (m A) - ZRA Potential (mV)
Range:	0 - 200 mpy 0 - 200 mA ± 1000 mV
Resolution:	Corrosion Rate - 0.01 mpy Metal Loss - 0.01 mils Probe Life - 1 unit
Control:	12 key membrane keypad
Memory Capacity:	3000 readings; screen reviewable using scroll feature
Communication Link:	RS232 serial port
Display:	4-line x 20 character LCD dot matrix
Memory Protection:	10-year battery, back-up life
Dimensions:	7.63 inches (h) x 4.15 inches (w) x 2.00 inches (d) 194 mm (h) x 105 mm (w) x 50 mm (d)
Weight:	1.5 lbs. (5.2 lbs. With hardshell case)
Power:	Three 1.5V, AA batteries
Part#:	IN1500L

Intrinsic Safety: Class 1, Division 1
Groups A,B,C and D
Temperature Code T2D
Class I, Zone 0
Group IIC, T2D
Conforms to ANSI UL Std. 913

BACK TO LINEAR POLARISATION MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

MS 2500L

The**MS2500L**is a micro-processor controlled transmitter that features transmission through a two-wire 4-20mA current loop.

The unit is designed to provide continuous on-line corrosion rate measurements using the 3 Electrode Technique.

The **MS2500L** is encased in a compact, UL-approved, explosion and weather proof NEMA enclosure. Operating temperatures range from 32ºF to 158ºF. If intrinsic safety is required, the unit can be powered by an isolated repeater power source.

Circuit board switches determine operation mode options, which include:

Excitation Polarity: anodic or cathodic

Cyclic Time: 1-99 minutes

Transmitter Data Type: Corrosion rate (mpy) or Electrode potential (mv)(br)

Installation costs are less with the **MS2500L** because all field wiring is the two-wire type. This eliminates the need for running special signal cables. (Note: The instrument is supplied with a 10-foot instrument-to-probe extension cable with connector).

Data from the **MS2500L** can be displayed on a suitable recorder, digital voltmeter, or the **MS2510** Receiver.

For convenience, the **MS2510** has an auxiliary power supply and a current loop output for passing data to another readout device.

BACK TO LINEAR POLARISATION MENU
SCROLL DOWN FOR SECOND PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Technical Specifications

Probe Type:	Three-electrode LPR
Potentiostatic Probe Excitation:	± 10mV
Allowable Ref-Test Potential for LPR Measurement:	± 200mV
Cycle Time Adjustment:	1-99 minutes
Corrosion Potential Measurement:	±1 V
Accuracy @ 25º C:	LPR Mode: ±0.2% Full Scale, Potential Mode: ±5 millivolts
Weight:	4 lbs. (1.8 kg)
Power Requirements:	11 to 35 Volts DC
Transmitter Type:	2-wire, 4-20mA
Output Signals:	4 - 20mA representing: 0 - 100 mils per year 0 to 1 volt potential 0 to -1 volt potential
Operating Temperature:	32ºF to 158º F (0º C to 70º C)
Temperature Stability:	0.8 microamps/Deg. C
Enclosure:	Adalet explosion-proof NEMA 4 Class I, Gr. B, C, D; Class II, Gr. E, F, G; Class III
Mounting Requirements:	Mounting hardware is supplied with the unit. It may be mounted up to 10 feet from the probe location to a flat surface or pipe.
Cable:	4-wire with shield (light armour), 10 feet
Intrinsic Safety:	Designed to be intrinsically safe in Zone 1, Group IIB hazardous areas with the use of 4-20mA, isolated, repeater power supplies.
Part#:	IN2500L

BACK TO LINEAR POLARISATION MENU

ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE +44(0)1635 552225 FAX: +44(0)1635 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

MS 3500L

The**MS3500L** Remote Data Logger is designed to provide a continuous record of corrosion activity in remote locations that are infrequently visited, such as cross-country pipelines and unmanned production platforms. However, this unit finds equal application in locations that are inconvenient or difficult to access on a regular basis.

The **MS3500L** is completely self-contained with the onboard battery system supplying the total power requirement for operation.

The unit is extremely versatile, having a variety of menu selectable measurement modes:

- Corrosion rate for 2-electrode LP probe
- Corrosion rate for 3-electrode LP probe
- "Pitting Index" for 2-electrode probe
- Galvanic current - Zero Resistance Ammetry
- Electrode Potential

Once in place, this unit will automatically read the probe at customer-selected intervals and store the resulting data in the unit’s onboard memory. The onboard memory will collect up to 3000 data points before data download is required. The data collection interval is programmable in hour intervals.

At a data collection interval of 1 hour, data downloading need only be performed every ninety days. With longer data collection intervals (8-12 hours), the unit may be unattended for as long as 6-8 months between downloading operation.

An optical, infrared, RS232 communication link is provided for data download to

BACK TO LINEAR POLARISATION MENU
SCROLL DOWN FOR SECOND PAGE

either a laptop (IBM compatible) PC, or to the **MS1500L** portable data logger.

Downloaded data may be analysed, reviewed, or reported by conventional spreadsheet, database, or mathematical software packages.

The infrared communication link is an integral part of the intrinsically safe design on the unit. Optical, instead of electrical, this unique feature permits data downloading without removing the instrument or "memory module" form the hazardous area.

Another unique feature of the **MS3500L** is the high level of onboard intelligence. The two-line, 20-character LCD screen allows visual review of all historical data in memory and reads directly as corrosion rate, millivolts or microamps. The LCD screen, together with the 2-key membrane key pad provides a user-friendly, interactive, prompting system that is used for both system setup and data review. This makes the **MS3500L** the most advanced unit of its type on the market.

An optional feature of the unit is the addition of a 4-20mA continuous output transmitter. This allows transmission of data, via a 4-20mA loop, to a plant computer or central data logger for integration with other real-time process parameters. This data transmission can be accomplished without disruption of the unit's basic logging and data storage operations. The 4-20mA loop extends the capabilities of the unit to include conventional, in-plant, real-time data communication.

The unit uses a NEMA 4X (IP-65) enclosure, making it suitable for use in the most extreme of outdoor conditions.

The inclusion of the potential and galvanic current as measurement model makes the unit a complete diagnostic tool for studying electrochemical corrosion. Not only can general corrosion rates be measured but, in addition, such phenomena as active-passive transitions, onset of pitting and crevice corrosion, bimetallic attack, and oxygen ingress can be monitored.

BACK TO LINEAR POLARISATION MENU **SCROLL DOWN FOR THIRD PAGE**

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE +44(0)1635 552225 FAX: +44(0)1635 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Technical Specifications

Functions:	Corrosion rate (MPY): Three-electrode measurement Corrosion rate (MPY): Two-electrode measurement Galvanic Current (m A) - ZRA Potential (mV)
Range:	0 - 200mpy 0 - 200mA ±1000mV
Resolution:	0.1% of full scale
Control:	Two-key membrane keypad
Memory Capacity:	3000 readings; screen reviewable using scroll feature
Reading Interval:	Programmable, hourly increments (1 - 1000)
Communication Link:	Infrared, RS232, 4-20mA (optional)
Enclosure:	11.50 inches (h) x 8.95 inches (w) x 4.00 inches (d) 292 mm (h) x 227 mm (w) x 102 mm (d) (NEMA 4X)
Power:	Six 1.5V “AA” Dry Cell Batteries
Weight:	11.94lbs (5.42kg)
Part#:	IN3500L (Remote LPR Data Logger) IN3510L (Remote LPR Data Logger with 4-20mA output transmitter)

Intrinsic Safety: Class 1. Division 1
Groups A, B, C and D
Temperature Code T3
Class I, Zone 0
Group IIC, T3
Conforms to ANSI UL Std. 913

BACK TO LINEAR POLARISATION MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

S 1000 Corrosion Monitor

Description
The MS1000 is a hand-held, battery-powered corrosion meter. This versatile instrument measures the instantaneous corrosion rate and the electrochemical current noise (ECN) between electrodes in the short-circuited condition. The instrument can analyse any two-electrode linear polarisation resistance (LPR) type probe.

Corrosion Rate Instantaneous corrosion rate measurements are made with linear polarisation resistance (LPR) technique. This instrument has been designed to calculate the corrosion rate of carbon steel and common grades of stainless steel in mils per year. Multiplication factors for copper, admiralty brass, and lead have been included on the front panel. The instrument has also been programmed to calculate the corrosion rate based on using electrodes with surface areas of 5 cm2. Multiplication factors may be used for electrodes with different surface areas.

Electrochemical Current Noise (ECN)
A high precision zero resistance ammeter is used for monitoring the electrochemical current noise between electrodes. The current is displayed in microamps. The magnitude of the ECN may be used as qualitative indication of the occurrence of localized corrosion such as pitting or microbiological influenced corrosion. The ECN function may also be used to monitor the galvanic current between electrodes of different alloys.

BACK TO LINEAR POLARISATION MENU
SCROLL DOWN FOR SECOND PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

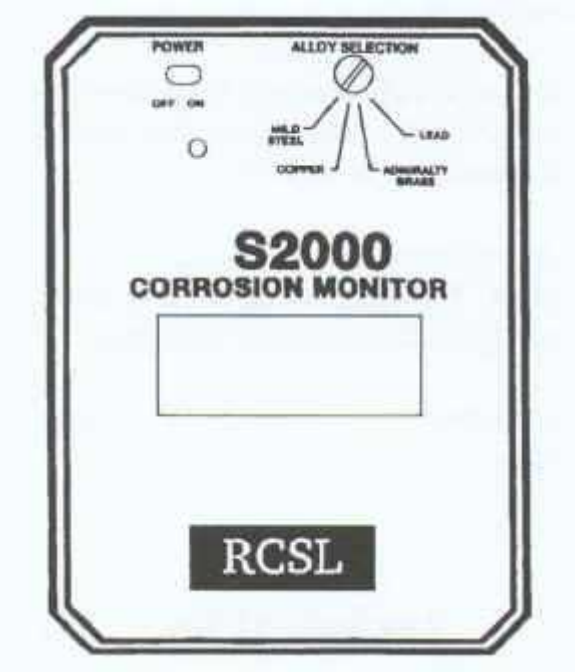
Specifications

	Range	Resolution
LPR Probe Configuration		
Cylindrical Electrodes	0 to 40mpy	0.02mpy
Flush Electrodes	0 to 400mpy	0.2mpy
Electrochemical Current Noise (ECN)	0 to 80mA	0.04mA
Measurement Time:	Corrosion Rate - 60 seconds Electrochemical Current Noise - 30 Seconds	
Retractable Cable:	2 inch (61cms) retracted 10 inch (3.05m) extended	
Compatible Probe Types:	All existing brands of 2-electrode probes	
Maximum Recommended Distance to Probe:	2000 ft (645 metres)	
Dimensions:	7.7 inches L x 4.2 inches W x 1.3 inches H 19.6cms L x 10.7cms x 3.3cms H	
Weight:	3 lbs. including carrying case	
Operating Temperatures:	32º to 122 º F (0º to 50º C)	
Storage Temperatures:	-4º to +158º F (-20º to +70º C)	
Battery:	One 9 volt rechargeable nickel-cadmium Standard automatic shutdown feature	
Features:	• Hand-held unit • Low battery indicator • "Beep" user alerts after measurement • Sleep mode after 25 seconds conserves power	

BACK TO LINEAR POLARISATION MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

S2000 Corrosion Monitor



The **S2000** is a microprocessor-based, field-mountable transmitter. Using the linear polarisation resistance technique, the **S2000** allows for the rapid determination of corrosion rates in real time.

The instrument also incorporates a high precision zero resistance ammeter to measure the electrochemical current noise (ECN) between the electrodes in the short-circuited condition. Electrochemical noise measurements offer excellent potential in the areas of detection and measurement of localised corrosion.

The corrosion rate and the ECN are transmitted with 4 - 20mA current loops and RS-232 communications.

Uses
This instrument, when combined with two-electrode corrosion probes, monitors the instantaneous corrosion rate, thus allowing the user to monitor inhibitor effectiveness, identify process upsets, and evaluate corrective actions in real time.

The **S2000** may be used to optimise the content, level, and dosage of corrosion inhibitors in both the plant and the lab.

The instrument may also be used to detect and qualitatively measure localised corrosion events such as pitting or microbiological influenced corrosion. These forms of corrosion contribute very little to the actual mass loss, but could be devastating to the life of the equipment.

BACK TO LINEAR POLARISATION MENU
SCROLL DOWN FOR SECOND PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Features

- Qualitative indication of localised corrosion. Generally, if the electrochemical current noise divided by two is less than the corrosion rate, then pitting may be occurring but the pits will probably be shallow and wide; however, pitting may be a serious concern if this value is greater than the corrosion rate.
- A low pass filter is included on the input of this instrument to eliminate electromagnetic noise.
- The electrical signal applied across the probes is electrically isolated from the transmitter power supply, thus eliminating potential ground loops that could influence the measured corrosion rate and ECN.
- The corrosion transmitter allows the user to set the alloy multiplier on the front panel of the instrument. The alloy multiplier selects a separate subroutine that automatically inputs the necessary values for each alloy type.
- The instrument is housed in a NEMA-4X enclosure and is mounted on a 4" x 8¾" mounting pattern.

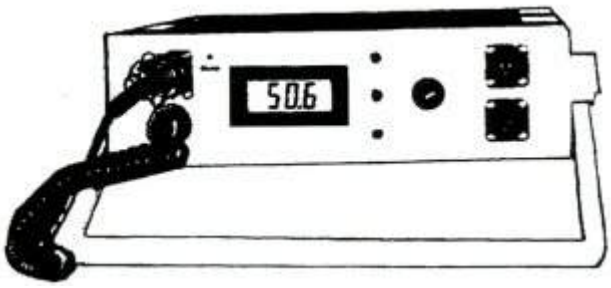
Technical Specifications

	Range	Resolution
LPR Probe Configuration		
Cylindrical Electrodes	0 to 40mpy	0.02mpy
Flush Electrodes	0 to 400mpy	0.2mpy
Zero Resistance Ammeter (ZRA)	0 to 80µA	0.04µA
Dimensions	9.5 inches L x 5 inches H x 6 inches W	
Weight	4 lbs. 11 oz.	
Operating Temperatures	32º to 122º F (0º to 50º C)	
Power	120 volts AC	
Maximum Recommended Distance to Probe:	2000ft (645 metres)	

BACK TO LINEAR POLARISATION MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

S 3000 Single Channel linear Polarisation Meter



- Corrosion rate is measured in mils per year using industry style two or three electrode flush or standard probes.
- Twin ranges of 0 - 200 and 0 - 2 mils per year allow for higher resolution with passive probe types such as 304 Stainless Steel.
- 4-20mA and 0-2v outputs of the corrosion rate are useful for long term monitoring with for instance a y*t recorder.
- To indicate localised corrosion a localised factor is supplied which is derived from the asymmetry of the current magnitude on reversing the polarity of the polarising potential. In practice this may be misleading and in general if localised corrosion such as pitting is taking place the value of the corrosion rate will be higher than expected and perhaps more variable with respect to time as pits change from active to passive.
- Greater than one day's battery life on full output enables the instrument to be left logging for long periods without mains supply.
- A calibration socket is provided on the front panel to test the instrument in service.
- The LPR Meter is housed in a robust case with carrying handles, mains cable, signal cable, and padded carrying bag.
- Rose Corrosion Services Limited supplies a one year guarantee on these instruments for parts and labour. Our repair and calibration service takes approximately two days from receipt of goods.

Technical Specifications

Dimensions (cm)	31 x 27 x 10 (W x D x H)
Weight	3.1 Kg
Power	220 - 240v AC or as requested
Battery	One 2.6 AHr Maintenance free lead acid.

BACK TO LINEAR POLARISATION MENU

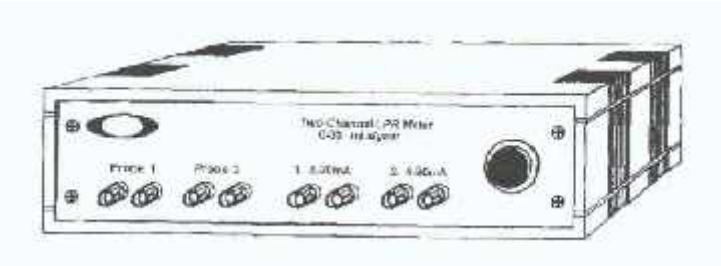
RCSL

ROSE CORROSION SERVICES LIMITED

1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

S 3002

TWO CHANNEL LPR METER



- Used for long term monitoring of corrosion rate on site.
- Monitoring of two LPR probes simultaneously.
- Two 4-20mA outputs, one for each channel enables easy connection to a plant control system for on line monitoring of corrosion without need for any computer system.
- Fixed range 0 - 30 mils per year or as specified.
- Calibrated for a probe size of 4.5 cm2 or as specified.
- Mains powered 240v AC or as specified.
- Simple connection to a two or three electrode probe.
- No knobs or ranges to set on the front or rear panel of the instrument.
- Normally housed in a small ABS plastic enclosure with engraved front and rear aluminium panels. However the instrument can be housed on an aluminium chassis plate, an environmental proof enclosure or several of them can be housed in a 19 inch rack, again as specified.
- Range of instrument is approximately 100 metres or more.
- Will operate through barrier diodes.
- Indication of local corrosion if LPR reading varies with time.
- Very simple to install, integrate and operate.
- Rose Corrosion supplies a one year guarantee on these instruments for parts and labour. Our repair and calibration service takes approximately two days from receipt of goods.

Technical Specifications(cm)

Dimensions (cm): 31 x 27 x 10 (W x D x H)

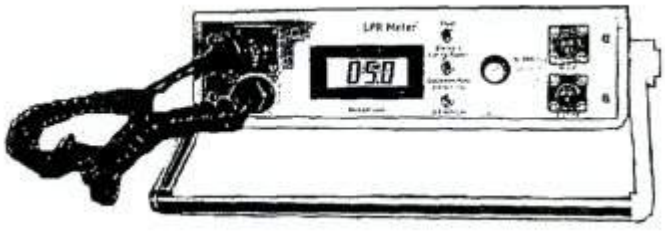
Weight: 2.1kg

Power: 220 - 240v AC or as requested.

BACK TO LINEAR POLARISATION MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

S3006
SIX CHANNEL LINEAR POLARISATION METER



- Used for long term monitoring of corrosion rate on site.
- Monitoring of six LPR probes simultaneously.
- Six 4-20mA outputs, one for each channel enables easy connection to a plant control system for on line monitoring of corrosion without the need for any computer system.
- Fixed range of 0 - 30 mils per year or as specified.
- Calibrated for a probe size of 4.5cms^2 or as specified.
- Mains powered 240v AC or as specified.
- Simple connection to a two or three electrode probe.
- No knobs or ranges to set on the front or rear panel of the instrument.
- The LPR Meter is housed in a robust case with carrying handle, mains cable, signal cable, and padded carrying bag.
- Range of instrument is approximately 100 metres or more.
- Will operate through barrier diodes.
- Indication of localised corrosion if LPR leading varies with time.
- Very simple to install, integrate and operate.
- RCS supplies a one year guarantee on these instruments for parts and labour. Our repair and calibration service takes approximately two days from receipt of goods.

Technical Specifications(cms)

Dimensions (cm): 31 x 27 x 10 (W x D x H)

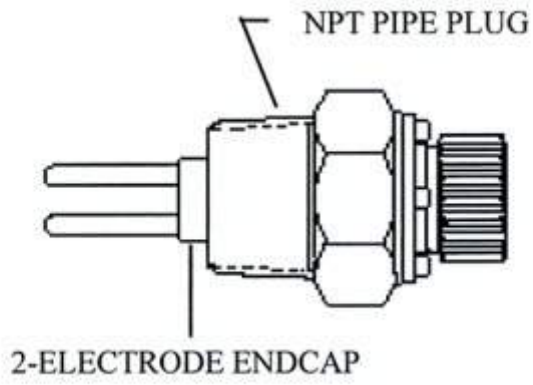
Weight: 2.1kg

Power: 220 - 240v AC or as requested.

BACK TO LINEAR POLARISATION MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model LP1000 - Linear Polarisation Resistance Probe with NPT Pipe Plug and 2-Electrode Endcap



Model LP1000 is a Linear Polarisation Resistance Probe commonly used in Laboratory, bypass-loop, and field applications. The assembly consists of an NPT pipe plug (1 inch, or 1.5 inch or 2 inch), a two-electrode endcap and a six-pin military connector mounted in place. Electrodes are ordered separately. Several standard electrodes are available to meet your specific needs.

Specifications:	
Probe Body	316 Stainless Steel
Endcap Seal	Glass
Fill Material	Epoxy
Temperature Rating	500° F/260° C.
Pressure Rating	3000psi/204 Bar
Mounting	1 inch, 1.5 inch, or 2 inch NPT Pipe Plug

BACK TO LINEAR POLARISATION MENU
SCROLL DOWN FOR SECOND PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

LP1000 ORDERING INFORMATION

Model				
LP13	Linear Polarisation 1 inch NPT Pipe Plug Probe			
LP16	Linear Polarisation 2 inch NPT Pipe Plug Probe			
LP17	Linear Polarisation 1.5 inch NPT Pipe Plug Probe			
	Probe Body Material			
	02	316		
	03	C.S.		
	04	C276		
		LP Electrode Options		
		20100	Two-electrode integral type with glass seal	
			Options	
			000	None
LP13	02	20100	000	Example of Probe Ordering #

Electrode Part Number - EL400XXX2800000 (XXX-use Code in Alloy Chart)
LPR probe electrodes are replaceable and sold separately.

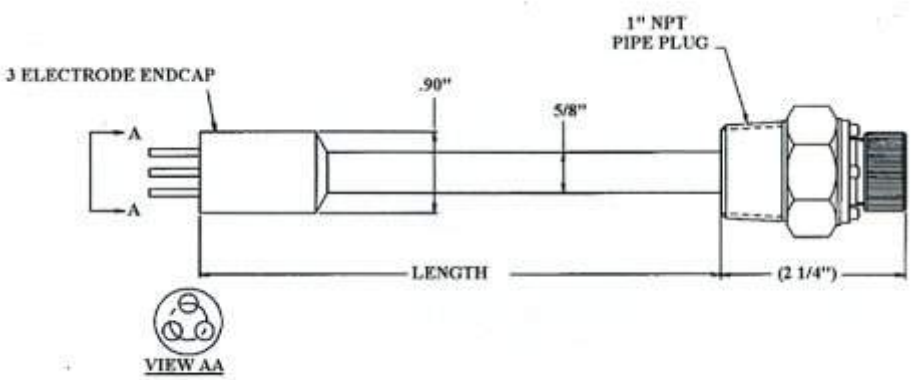
Alloy Chart		
Code	Description	UNS#
377	C1018	G10180
159	316L S.S.	S31603
419	CDA110	C11000
434	CDA443	C44300

For alloys, sizes, or other special requirements not listed, contact our sales department.
Note: Not all alloys are available with all element types and seals.

BACK TO LINEAR POLARISATION MENU

ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model LP1100 - Linear Polarisation Resistance Probe with 1 Inch NPT Pipe Plug and 3-Electrode Endcap



Model LP1100 Linear Polarisation Resistance Probe is commonly used in Laboratory, bypass-loop, and field applications. The assembly consists of an insertion rod, a three-electrode endcap a 1 inch pipe plug and a five-pin military connector mounted in place. The minimum probe LENGTH is 0.5 inches. Probes can be ordered up to any length required by the customer in 0.25 inch increments. The insertion length is calculated by adding the electrode length (1.25 inches) to the LENGTH. Electrodes are ordered separately. Several standard electrodes are available to meet your specific needs.

Specifications:	
Probe Body	316 Stainless Steel
Endcap Seal	Glass
Fill Material	Ceramic or Epoxy
Temperature Rating	500o F/260o C.
Pressure Rating	3000 PSI/204 Bar
Mounting	1 inch NPT Pipe Plug

BACK TO LINEAR POLARISATION MENU
SCROLL DOWN FOR SECOND PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

LP1100 ORDERING INFORMATION

Model					
LP13	Linear Polarisation 1 inch NPT Pipe Plug Probe				
LP16	Linear Polarisation 2 inch NPT Pipe Plug Probe				
LP17	Linear Polarisation 1.5 inch NPT Pipe Plug Probe				
	Probe Body Material				
	02	316			
	03	C.S.			
	04	C276			
		LP Electrode Options			
		10	Three-electrode plug type (replaceable mounting studs		
		30	Three-electrode integral type (non-replaceable mounting studs		
			Seal Type		
			100	Glass	
				Options	
				000	None
LP13	02	30	100	000	Example of Probe Ordering #

Electrode Part Number - EL412XXX2800000 (XXX-use Code in Alloy Chart)
LPR probe electrodes are replaceable and sold separately.

Alloy Chart		
Code	Description	UNS#
377	C1018	G10180
159	316L S.S.	S31603
419	CDA110	C11000
434	CDA443	C44300

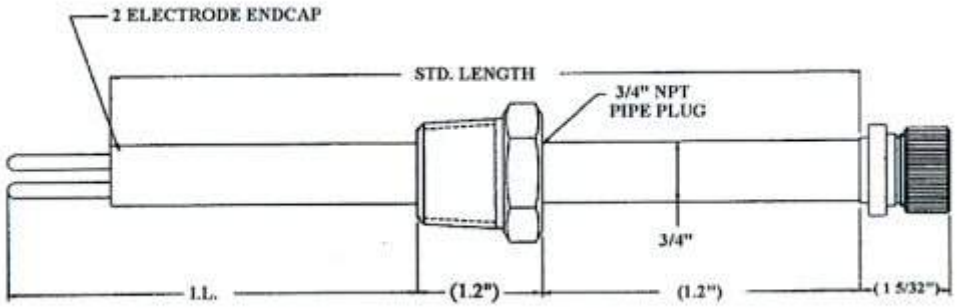
For alloys, sizes, or other special requirements not listed, contact our sales department.

Note: Not all alloys are available with all element types and seals.

BACK TO LINEAR POLARISATION MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model LP2000 - Linear Polarisation Resistance Probe Fixed Length with 0.75 Inch NPT Pipe Plug and 2-Electrode Endcap



Model LP2000 Linear Polarisation Resistance Probe is a fixed length probe with a 0.75 inch NPT pipe plug. The probe require process isolation or process shutdown to install and a threaded pipe fitting to mount. The probe assembly consists of an insertion rod with a two electrode endcap a hermatically sealed connector and a 0.75 inch NPT pipe plug which are all welded in place. The insertion length (I.L.) is calculated to the end of the electrode and can be specified by the customer. For the standard probes, the maximum insertion length is given in the chart below. Electrodes are ordered separately. Several standard electrodes are available to meet your specific needs.

Specifications:	
Probe Body	316 Stainless Steel
Endcap Seal	Glass
Fill Material	Ceramic or Epoxy
Temperature Rating	500° F/260° C.
Pressure Rating	3000psi/204 Bar
Mounting	0.75 inch NPT Pipe Plug

STD. LENGTH	I.L. (max)
6"	5.05”
8"	7.05”
12"	11.05”
18"	17.05”

BACK TO LINEAR POLARISATION MENU
SCROLL DOWN FOR SECOND PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

LP2000 ORDERING INFORMATION

Model							
LP2	Linear Polarisation Fixed Length Pipe Plug Probe						
	Pipe Plug Size						
	2	0.75 inch NPT					
	3	1 inch NPT					
		Probe Body Material					
		22	316				
		44	C276				
			LP Electrode Options				
			20	Two-electrode integral type			
				Seal Type			
				1	Glass		
					Length		
					06	5.05 inch max. insertion length	
					08	7.05 inch max. insertion length	
					12	11.05 inch max. insertion length	
					18	17.05 inch max. insertion length	
						Options	
						000	None
LP2	02	22	20	1	08	000	Example of Probe Ordering #

Electrode Part Number - EL400XXX2800000 (XXX-use Code in Alloy Chart)
LPR probe electrodes are replaceable and sold separately.

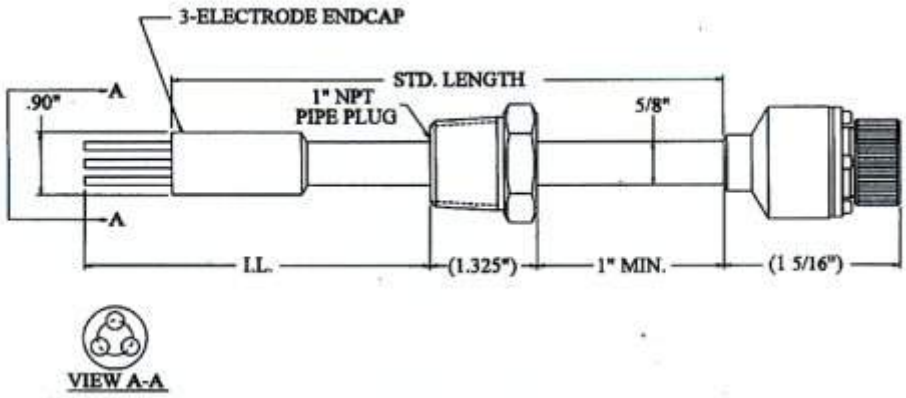
Alloy Chart		
Code	Description	UNS#
375	C1010	G10100
419	CDA110	C11000
434	CDA443	C44300
159	316L S.S.	S31603

For alloys, sizes, or other special requirements not listed, contact our sales department.
Note: Not all alloys are available with all element types and seals.

BACK TO LINEAR POLARISATION MENU

ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model LP2100 - Linear Polarisation Resistance Probe
Fixed Length with 1 Inch NPT Pipe Plug
and 3-Electrode Endcap



Model LP2100 Linear Polarisation Resistance Probe is a fixed length probe with a 1 inch NPT pipe plug. The probe require process isolation or process shutdown to install and a threaded pipe fitting to mount. The probe assembly consists of an insertion rod with a three electrode endcap a 1 NPT pipe plug and a five-pin military connector mounted in place. The insertion length (I.L.) is calculated to the end of the electrode and can be specified by the customer. For the standard probes, the maximum insertion length is given in the chart below. The maximum I.L. is based on the length of a carbon steel electrode. **Electrode lengths may vary depending on the alloy** Electrodes are ordered separately.

Specifications:	
Probe Body	316 Stainless Steel
Endcap Seal	Glass
Fill Material	Ceramic or Epoxy
Temperature Rating	500 ° F / 260 ° C.
Pressure Rating	3000 PSI/204 Bar
Mounting	1 inch NPT Pipe Plug

STD. LENGTH	I.L (max)
8"	6.92”
12"	10.92”
18"	16.92”

BACK TO LINEAR POLARISATION MENU
SCROLL DOWN FOR SECOND PAGE

RCSL

ROSE CORROSION SERVICES LIMITED

1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

LP2100 ORDERING INFORMATION

Model							
LP2	Linear Polarisation Fixed Length Pipe Plug Probe						
	Pipe Plug Size						
	3	1 inch NPT					
		Probe Body Material					
		22	316				
			LP Electrode Options				
			10	Three-electrode plug type			
			30	Three-electrode integral type			
				Seal Type			
				1	Glass		
					Length		
					08	6.92 inch max. insertion length	
					12	10.92 inch max. insertion length	
					18	16.92 inch max. insertion length	
						Options	
						000	None
LP2	3	22	30	1	08	000	Example of Probe Ordering #

Electrode Part Number - EL412XXX2800000 (XXX-use Code in Alloy Chart)
LPR probe electrodes are replaceable and sold separately.

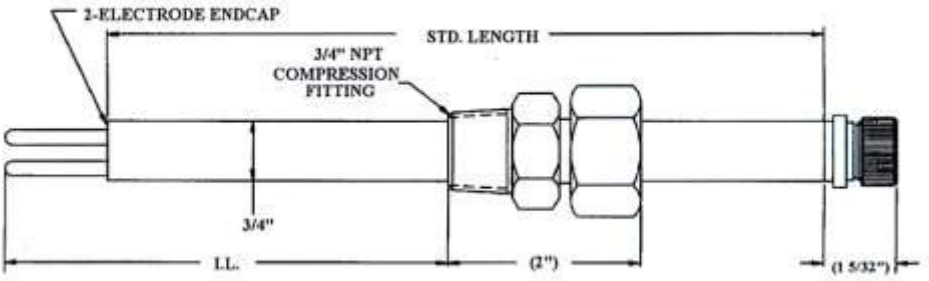
Alloy Chart		
Code	Description	UNS#
377	C1018	G10180
159	316L S.S.	S31603
419	CDA110	C11000
434	CDA443	C44300

For alloys, sizes, or other special requirements not listed, contact our sales department.
Note: Not all alloys are available with all element types and seals.

BACK TO LINEAR POLARISATION MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model LP3000 - Linear Polarisation Resistance Probe Adjustable Length with 0.75 Inch NPT Fitting and 2-Electrode Endcap



Model LP3000 Linear Polarisation Resistance Probe is commonly used in laboratory bypass-loop, and field applications. The assembly consists of a 0.75 inch NPT compression fitting, an insertion rod with a hermetically sealed two electrode endcap and a six-pin connector welded in place. The insertion length (I.L.) is calculated to the end of the electrode and can be specified by the customer. For standard probes, the maximum insertion length is given in the chart below. Several standard electrodes are available to meet your specific needs.

Specifications:	
Probe Body	316 Stainless Steel
Endcap Seal	Glass
Fill Material	Ceramic or Epoxy
Temperature Rating	500° F/260° C.
Pressure Rating	1500psi/102 Bar
Mounting	0.75 inch NPT

STD. LENGTH	I.L. (max)
6"	5.25”
8"	7.25”
12"	11.25”
18"	17.25”

BACK TO LINEAR POLARISATION MENU
SCROLL DOWN FOR SECOND PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

LP3000 ORDERING INFORMATION

Model							
LP3	Linear Polarisation Adjustable Length Pipe Plug Probe						
	Pipe Plug Size						
	2	0.75 inch NPT					
	3	1 inch NPT					
		Probe Body Material					
		22	316				
			LP Electrode Options				
			20	Two-electrode integral type			
				Seal Type			
				1	Glass		
					Length		
					06	5.25 inch max. insertion length	
					08	7.25 inch max. insertion length	
					12	11.25 inch max. insertion length	
					18	17.25 inch max. insertion length	
						Options	
						000	None
LP3	2	22	20	1	08	000	Example of Probe Ordering #

Electrode Part Number - EL400XXX2800000 (XXX-use Code in Alloy Chart)
LPR probe electrodes are replaceable and sold separately.

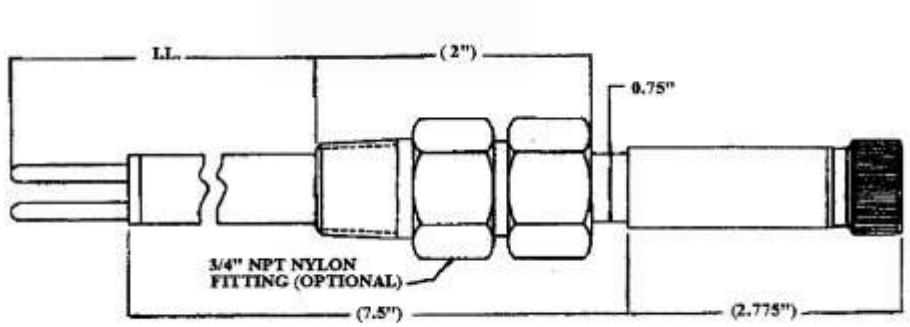
Alloy Chart		
Code	Description	UNS#
375	C1010	G10100
419	CDA110	C11000
434	CDA443	C44300
159	316L S.S.	S31603

For alloys, sizes, or other special requirements not listed, contact our sales department.
Note: Not all alloys are available with all element types and seals.

BACK TO LINEAR POLARISATION MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model LP3010 - Epoxy Probe



Model LP3010 Linear Polarisation Resistance Probe is commonly used in laboratory bypass-loop and field applications. The probe (with additional instrumentation) can be used to monitor corrosion rates, evaluate materials and screen corrosion inhibitors. The assembly consists of a glass epoxy probe with an optional 0.75 inch NPT Nylon compression fitting for insertion into the system. The Studs for mounting the electrodes and the six pin connector are held in place by the epoxy fill material. The insertion length (I.L.) is 6.75 inches when the compression fitting is used and 8.75 inches when the fitting is not used. Electrodes are ordered separately.

Specifications:	
Probe Body	Class Epoxy
Endcap Seal	Epoxy
Fill Material	Epoxy
Temperature Rating	
(with Nylon compression fitting)	150o F/65o C.
(without Nylon compression fitting)	300oF/150o C.
Pressure Rating	100psi/7 Bar
Mounting	0.75 inch Pipe Plug

BACK TO LINEAR POLARISATION MENU
SCROLL DOWN FOR SECOND PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

LP3010 ORDERING INFORMATION

Model								
LP3	Linear Polarisation Adjustable Length Pipe Plug Probe							
	Pipe Plug Size							
	2	0.75 inch NPT						
		Probe Body Material						
		7	Epoxy					
			Mount (Pipe Plug) Material					
			0	No adjustable pipe plug fitting				
			E	Nylon				
				LP Electrode Options				
				20	Two-electrode integral type			
					Seal Type			
					3	Epoxy		
						Length		
						11	11 inch	
							Options	
							000	None
LP3	2	7	E	20	3	11	000	Example of Probe Ordering #

Electrode Part Number - EL400XXX2800000 (XXX-use Code in Alloy Chart)
LPR probe electrodes are replaceable and sold separately.

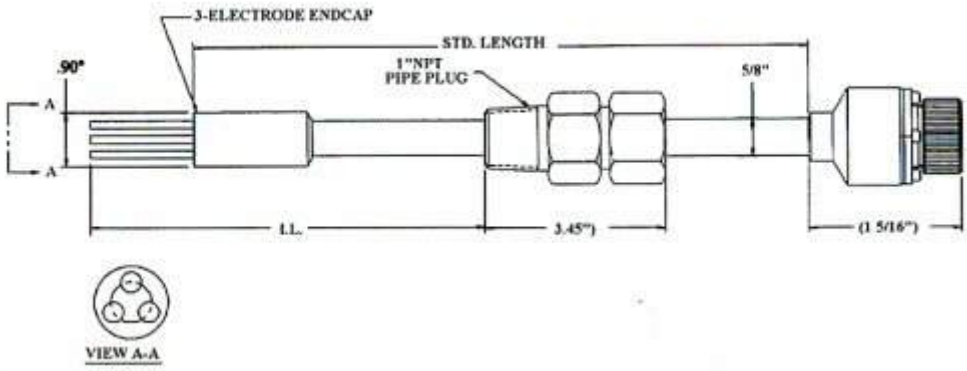
Alloy Chart		
Code	Description	UNS#
375	C1010	G10100
419	CDA110	C11000
434	CDA443	C44300
159	316L S.S.	S31603

For alloys, sizes, or other special requirements not listed, contact our sales department.
Note: Not all alloys are available with all element types and seals.

BACK TO LINEAR POLARISATION MENU

ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model LP3100 - Linear Polarisation Resistance Probe
Adjustable Length with 1 Inch NPT Fitting
and 3-Electrode Endcap



Model LP3100 Linear Polarisation Resistance Probe is commonly used in laboratory bypass-loop, and field applications. The assembly consists of a 1 inch NPT compression fitting, an insertion rod with a hermetically sealed three electrode endcap and a five-pin military connector mounted in place. The insertion length (I.L.) is calculated to the end of the electrode and can be specified by the customer. For standard probes, the maximum insertion length is given in the chart below. This maximum I.L. is based on the length of a carbon steel electrode. **Electrode lengths may vary depending on the alloy.** Electrodes are ordered separately.

Specifications:	
Probe Body	Stainless Steel
Endcap Seal	Glass
Fill Material	Ceramic or Epoxy
Temperature Rating	500° F/260° C.
Pressure Rating	1500psi/102 Bar
Mounting	1 inch NPT

STD. LENGTH	I.L. (max)
8"	5.8”
12"	9.8”
18"	15.8”

BACK TO LINEAR POLARISATION MENU
SCROLL DOWN FOR SECOND PAGE

RCSL

ROSE CORROSION SERVICES LIMITED

1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

LP3100 ORDERING INFORMATION

Model							
LP3	Linear Polarisation Adjustable Length Pipe Plug Probe						
	Pipe Plug Size						
	3	1 inch NPT					
		Probe Body Material					
		22	316				
			LP Electrode Options				
			10	Three-electrode plug type			
			30	Three-electrode integral type			
				Seal Type			
				1	Glass		
					Length		
					08	5.8 inch max. insertion length	
					12	9.8 inch max. insertion length	
					18	15.8 inch max. insertion length	
						Options	
						000	None
LP3	3	22	30	1	08	000	Example of Probe Ordering #

Electrode Part Number - EL412XXX2800000 (XXX-use Code in Alloy Chart)
LPR probe electrodes are replaceable and sold separately.

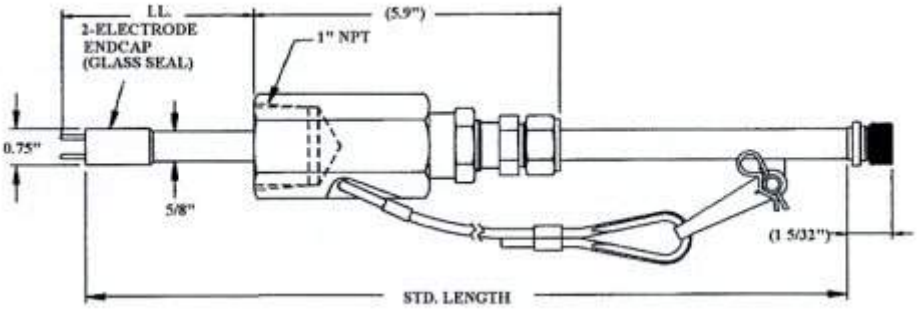
Alloy Chart		
Code	Description	UNS#
377	C1018	G10180
159	316L S.S.	S31603
419	CDA110	C11000
434	CDA443	C44300

For alloys, sizes, or other special requirements not listed, contact our sales department.
Note: Not all alloys are available with all element types and seals.

BACK TO LINEAR POLARISATION MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model LP4000 - Linear Polarisation Resistance Probe with 2-Electrode Endcap and Packing Gland



Model LP4000 Linear Polarisation Resistance Probe is commonly used in high pressure and high temperature applications. A specially designed packing gland is used with the probe for insertion into or retraction from a pressurised system without a process shutdown. The packing gland is designed to mount easily on a 1 inch piping system, but it can be modified for your specific mounting requirements. The probe assembly consists of a packing gland, an insertion rod with a hermatically sealed 2 electrode endcap and a six-pin connector welded in place. A safety cable is also provided to prevent blowout. Standard packing material in the packing gland is Teflon, however, graphoil packing can be provided for high temperature applications. The insertion length (I.L.) is calculated to the end of the electrode and can be specified by the customer. Electrodes for the probes can be ordered separately. Several standard electrodes and probe lengths are available to meet your specific needs.

Specifications:	
Probe Body	316 Stainless Steel
Endcap Seal	Glass
Fill Material	Ceramic
Temperature Rating	500° F/260° C. - Teflon
	1200° F/649° C. - Graphoil
Pressure Rating	1500psi/102 Bar
Mounting	1 inch Full Port Valve (Min)

STD. LENGTH	I.L. (max)
18"	11.53”
24"	17.53”
30"	23.53”
36"	29.53”
42"	35.53”

Metal samples Easy Tool is recommended for probe insertion or retraction in systems with pressure over 150 pounds.

BACK TO LINEAR POLARISATION MENU
SCROLL DOWN FOR SECOND PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

LP4000 ORDERING INFORMATION

Model						
LP45	Linear Polarisation 1 inch Female NPT Probe with Packing Gland					
	Probe Body Material					
	22	316				
	44	C276				
		LP Electrode Options				
		20	Two-electrode integral type			
			Seal Type			
			1	Glass		
				Length		
				18	11.53 inch max. insertion length	
				24	17.53 inch max. insertion length	
				30	23.53 inch max. insertion length	
				36	29.53 inch max. insertion length	
				42	35.53 inch max. insertion length	
					Options	
					000	None
LP45	22	20	1	18	000	Example of Probe Ordering #

Electrode Part Number - EL400XXX2800000 (XXX-use Code in Alloy Chart)
LPR probe electrodes are replaceable and sold separately.

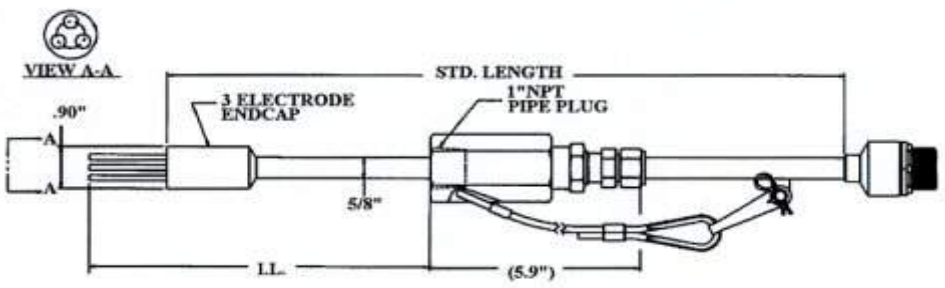
Alloy Chart		
Code	Description	UNS#
375	C1010	G10100
419	CDA110	C11000
434	CDA443	C44300
159	316L S.S.	S31603

For alloys, sizes, or other special requirements not listed, contact our sales department.
Note: Not all alloys are available with all element types and seals.

BACK TO LINEAR POLARISATION MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model LP4100 - Linear Polarisation Resistance Probe with 3-Electrode Endcap and Packing Gland



Model LP4100 Linear Polarisation Resistance Probe is commonly used in high pressure and high temperature applications. A specially designed packing gland is used with the probe for insertion into or retraction from a pressurised system without a process shutdown. The packing gland is designed to mount easily on a 1 inch piping system, but it can be modified for your specific mounting requirements. The probe assembly consists of a packing gland, an insertion rod with a hermatically sealed 3-electrode endcap and a five-pin military connector mounted in place. A safety cable is also provided to prevent blowout. Standard packing material in the packing gland is Teflon, however, graphoil packing can be provided for high temperature applications. The insertion length (I.L.) is calculated to the end of the electrode and can be specified by the customer. For standard probes, the maximum insertion length is given in the chart below. This maximum I.L. is based on the length of a carbon steel electrode.

Electrode lengths may vary depending on the alloy.

Electrodes are ordered separately.

Specifications:	
Probe Body	316 Stainless Steel
Endcap Seal	Glass
Fill Material	Ceramic
Temperature Rating	500° F/260° C. - Teflon
	1200° F/649° C. - Graphoil
Pressure Rating	1500 PSI/102 Bar
Mounting	1 inch Full Port Valve (Min)

STD. LENGTH	I.L. (max)
18"	11.53”
24"	17.53”
30"	23.53”
36"	29.53”
42"	35.53”

Metal samples Easy Tool is recommended for probe insertion or retraction in systems with pressure over 150 pounds.

BACK TO LINEAR POLARISATION MENU
SCROLL DOWN FOR SECOND PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

LP4100 ORDERING INFORMATION

Model						
LP45	Linear Polarisation 1 inch Female NPT Probe with Packing Gland					
	Probe Body Material					
	22	316				
	44	C276				
		LP Electrode Options				
		10	Three-electrode plug type			
		30	Three-electrode integral type			
			Seal Type			
			1	Glass		
				Length		
				18	11.53 inch max. insertion length	
				24	17.53 inch max. insertion length	
				30	23.53 inch max. insertion length	
				36	29.53 inch max. insertion length	
				42	35.53 inch max. insertion length	
					Options	
					000	None
LP45	22	30	1	18	000	Example of Probe Ordering #

Electrode Part Number - EL412XXX2800000 (XXX-use Code in Alloy Chart)
LPR probe electrodes are replaceable and sold separately.

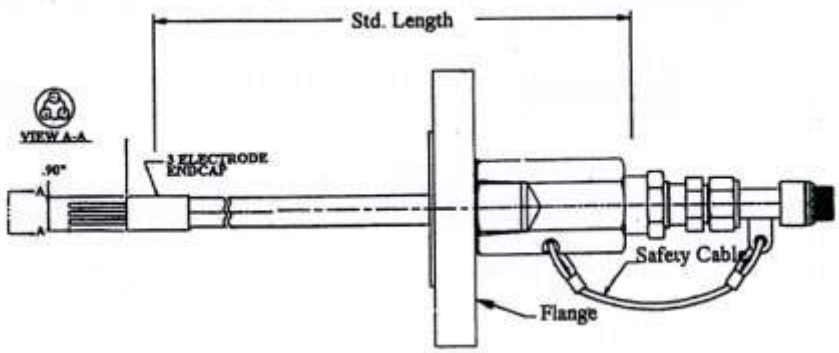
Alloy Chart		
Code	Description	UNS#
377	C1018	G10180
159	316L S.S.	S31603
419	CDA110	C11000
434	CDA443	C44300

For alloys, sizes, or other special requirements not listed, contact our sales department.
Note: Not all alloys are available with all element types and seals.

BACK TO LINEAR POLARISATION MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model LP4104 - Linear Polarisation Resistance Probe with Packing Gland Flange and 3-Electrode Endcap



All Dimensions in Inches

Model LP4104 is a retractable length, flange mounted Linear Polarisation Probe. The probe is ideally suited for use in high pressure and/or hazardous applications where threaded fittings are not available. A specially designed packing gland is used with the probe for insertion into or retraction from a pressurised system without a process shutdown. The packing gland is designed to mount easily on a 1 inch piping system, but it can be modified for your specific mounting requirements. The probe assembly consists of a packing gland, an insertion rod with a hermatically sealed 3-electrode endcap and a five-pin military connector mounted in place. A safety cable is also provided to prevent blowout. Standard packing material in the packing gland is Teflon, however, graphoil packing can be provided for high temperature applications. The insertion length (I.L.) is calculated to the end of the electrode and can be specified by the customer. For standard probes, the maximum insertion length is given in the chart below.

Specifications:	
Probe Body	316 Stainless Steel
Endcap Seal	Glass
Fill Material	Ceramic
Temperature Rating	500° F/260° C.
Pressure Rating	According to Flange Rating

STD. LENGTH	I.L. (max)
18"	11.53”
24"	17.53”
30"	23.53”
36"	29.53”

BACK TO LINEAR POLARISATION MENU
SCROLL DOWN FOR SECOND PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

LP4104 ORDERING INFORMATION

Model								
LP45	Linear Polarisation Fixed Length Probe with Flange with Packing Gland							
	Flange Size							
	1	1 inch Flange						
	2	1.5 inch Flange						
	3	2 inch Flange						
	4	3 inch Flange						
	5	4 inch Flange						
	6	0.5 inch Flange						
	7	6 inch Flange						
		Probe Body Material						
		22	316					
		44	C276					
			LP Element Options					
			10	Three-electrode plug type				
			30	Three-electrode integral type				
				Flange Pressure Rating				
				10	150 lb			
				20	300 lb			
				30	600 lb			
				40	1200 lb			
				50	1500 lb			
				60	900 lb			
					Length			
					18	14.85 inch max. insertion length		
					24	20.85 inch max. insertion length		
					30	26.85 inch max. insertion length		
					36	32.85 inch max. insertion length		
						Seal Type		
						1	Glass	
							Options	
							00	None
LP45	2	22	30	20	18	1	00	Example of Probe Ordering #

Alloy Chart		
Code	Description	UNS#
377	C1018	G10180
159	316L S.S.	S31603
419	CDA110	C11000
434	CDA443	C44300

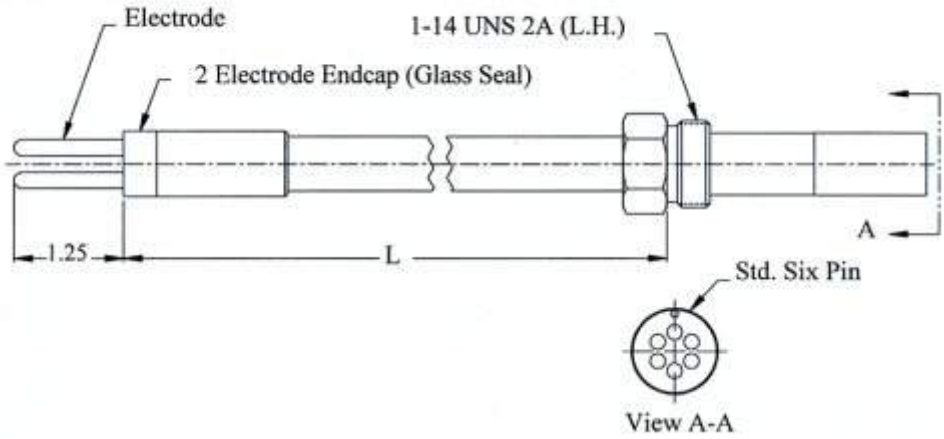
For alloys, sizes, or other special requirements not listed, contact our sales department.

Note: Not all alloys are available with all element types and seals.

BACK TO LINEAR POLARISATION MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model LP7000 - Linear Polarisation Resistance Probe (2 Electrodes)for the 2 inch Access System



Model LP7000 Electrical Resistance Probe is a fixed-length probe for use with the 2 inch access system at high pressure and high temperatures. The probe assembly consists of an insertion rod with a hermatically sealed two electrode endcap, a hollow plug nut, and a standard six pin connector, which are all welded in place. The hollow plug nut on the probe screws into the hollow plug of the access system. This allows the probe to be installed in the process, using a retriever tool and service valve, without process shutdown. Several standard elements and probe lengths are available to meet your specific needs. Probe adaptors are also available and must be ordered separately. (Refer to the Element and Alloy Selection Chart below for more information).

Specifications:

Probe Body	- 316 Stainless Steel
Fill Material	- Ceramic
Temperature Rating	- 500°F/260°C
Pressure Rating	- 3600 PSI/245 Bar
Mounting	- 2” Access System with Hollow Plug

BACK TO LINEAR POLARISATION MENU
SCROLL DOWN FOR SECOND PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

LP7000 ORDERING INFORMATION

Model							
HL	Linear Polarisation Two-Electrode Probe for High Pressure Access System						
	Mounting Material						
	2	316					
	3	C276					
		Connector Type					
		1	Small Connector				
		2	Standard Connector				
			LP Electrode Options				
			0	Two-electrode integral type			
			3	Two-electrode flush integral type			
			5	Two-electrode flush adjustable type			
				Seal Type			
				0	Glass		
				1	Epoxy		
					Length		
					XXXX	Length in inches, stated in 2 decimal place format	
						(Ex: 6.25 inches = 0625	
						Options	
						000	None
HL	2	2	0	0	625	000	Example of Probe Ordering #

Electrode Part Number - EL400XXX2800000 (XXX-use Code in Alloy Chart)
LPR probe electrodes are replaceable and sold separately.

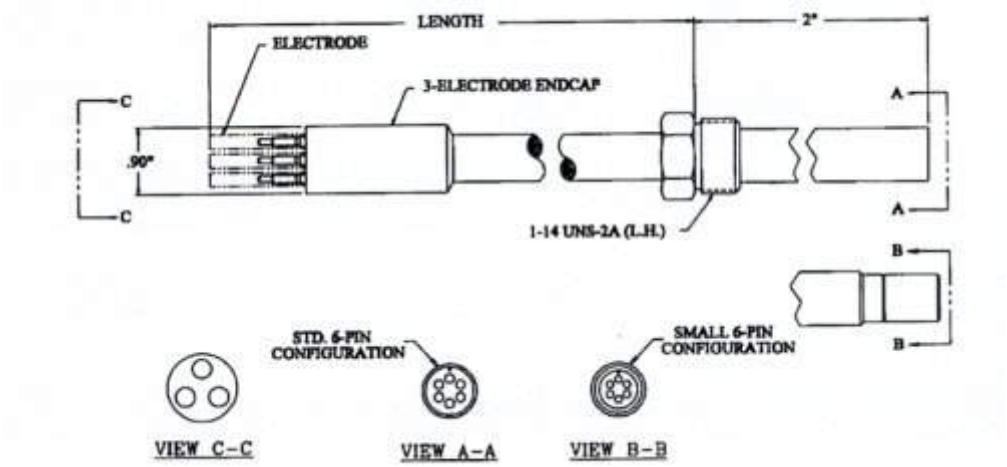
Alloy Chart		
Code	Description	UNS#
375	C1010	G10100
419	CDA110	C11000
434	CDA443	C44300
159	316L S.S.	S31603

For alloys, sizes, or other special requirements not listed, contact our sales department.
Note: Not all alloys are available with all element types and seals.

BACK TO LINEAR POLARISATION MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model LP7100 - Linear Polarisation Resistance Probe with 3-Electrode Endcap



Model LP7100 Linear Polarisation Resistance Probe is a fixed-length probe for use with a 2 inch access system at high pressure and high temperatures. The probe assembly consists of an insertion rod with a hermatically sealed 3-electrode endcap, a hollow plug nut and a standard six pin connector, which are all welded in place. The hollow plug nut on the probe screws into the hollow plug of the access system. This allows the probe to be installed in the process, using a retriever tool and service valve, without process shutdown. The insertion length is equal to that of the LENGTH and can be specified by the customer. Several standard electrodes are available to meet your specific needs. Probe adaptors are also available and must be ordered separately.

Specifications:	
Probe Body	316 Stainless Steel
Endcap Seal	Glass
Fill Material	Ceramic
Temperature Rating	500° F/260° C.
Pressure Rating	3600psi/245 Bar
Mounting	2 inch Access System with Hollow Plug

BACK TO LINEAR POLARISATION MENU
SCROLL DOWN FOR SECOND PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

LP7100 ORDERING INFORMATION

Model							
HL	Linear Polarisation Three-Electrode Probe for High Pressure Access System						
	Mounting Material						
	2	316					
	3	C276					
		Connector Type					
		1	Small Connector				
		2	Standard Connector				
			LP Electrode Options				
			1	Three-electrode integral type			
				Seal Type			
				0	Glass		
					Length		
					XXXX	Length in inches, stated in 2 decimal place format	
						(Ex: 6.25 inches = 0625	
						Options	
						000	None
HL	2	2	2	0	625	000	Example of Probe Ordering #

Electrode Part Number - EL412XXX2800000 (XXX-use Code in Alloy Chart)
LPR probe electrodes are replaceable and sold separately.

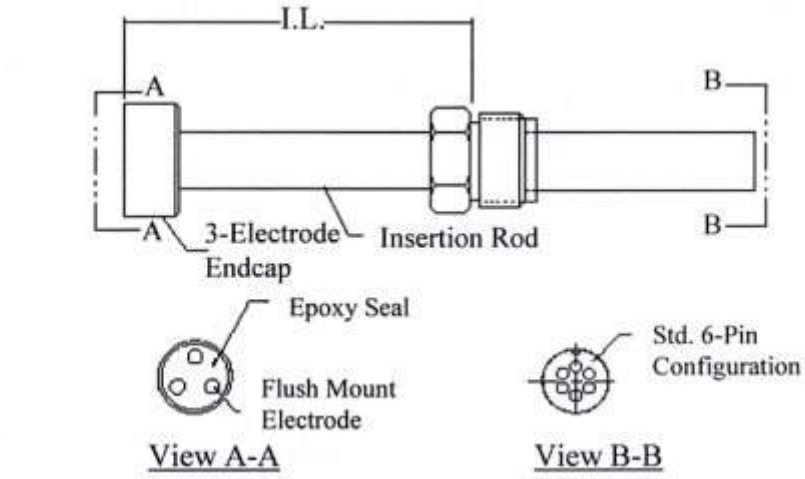
Alloy Chart			
Code	Description	UNS#	Electrode Length (EL)
377	C1018	G10180	1.72 inches
159	316L S.S.	S31603	1.62 inches
419	CDA110	C11000	3.50 inches
434	CDA443	C44300	3.17 inches

For alloys, sizes, or other special requirements not listed, contact our sales department.
Note: Not all alloys are available with all element types and seals.

BACK TO LINEAR POLARISATION MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model LP7210 - Linear Polarisation Resistance Probe Retrievable with Flush-Mount 3-Electrode Endcap for High Pressure (HP TM and MH TM Access Systems



Model LP7210 is a fixed-length, flush-mount, three electrode, retrievable, linear polarisation resistance probe for use with HP TM and MH TM high pressure access systems. These probes are ideally suited for applications where the probe electrodes need to be flush with the wall of the pipe. The probe assembly consists of an insertion rod, a flush mount, three-electrode endcap and a six-pin military connector. The hollow plug nut on the probe screws into the hollow plug of the access system. This allows the probe to be installed in the process, using a retriever tool and service valve, without process shutdown. The probe's three-electrode endcap is filled with an epoxy seal. Electrodes are not replaceable. The insertion length (I.L.) can range from a minimum of 1.75 inches up to any length specified by the customer, using the formula:

I.L. = PD + WT + 1.75"
(where PD=penetration depth, WT=wall thickness)
For top-of-the-line, flush-mount monitoring, PD=0

Note: Formula valid for access fitting heights of 5.25" (HP) and 5.5" (MH)

Specifications:	
Probe Body	316 Stainless Steel
Endcap Seal	Epoxy
Fill Material	Epoxy
Temperature Rating	500° F/260° C.
Pressure Rating	3600psi/245 Bar
Mounting	High Pressure Access System with Hollow Plug

BACK TO LINEAR POLARISATION MENU
SCROLL DOWN FOR SECOND PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

LP7210 ORDERING INFORMATION

Model							
HL	Linear Polarisation Three-Electrode Probe for High Pressure Access System						
	Mounting Material						
	2	316					
	3	C276					
		Connector Type					
		2	Standard Connector				
			LP Electrode Options				
			4	Three-electrode integral flush type			
			6	Three-electrode integral flush adjustable type			
				Seal Type			
				1	Epoxy		
					Length		
					XXXX	Length in inches, stated in 2 decimal place format	
						(Ex: 6.25 inches = 0625)	
						Electrode Alloy	
						XXX	Use Code in Alloy Chart
HL	2	2	4	1	0625	XXX	Example of Probe Ordering #

Electrode Part Number - EL412XXX2800000 (XXX-use Code in Alloy Chart)
LPR probe electrodes are replaceable and sold separately.

Alloy Chart		
Code	Description	UNS#
377	C1018	G10180
159	316L S.S.	S31603
419	CDA110	C11000
434	CDA443	C44300

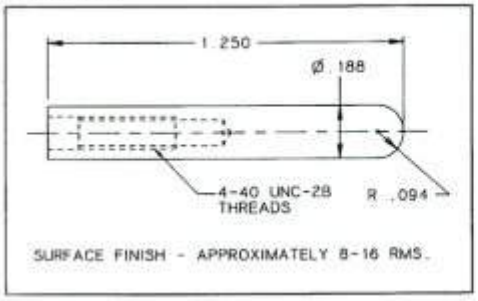
For alloys, sizes, or other special requirements not listed, contact our sales department.
Note: Not all alloys are available with all element types and seals.

BACK TO LINEAR POLARISATION MENU

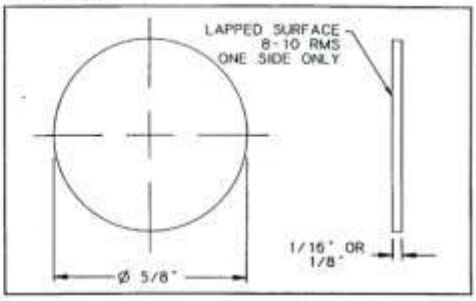
RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Electrodes for Electro-Chemistry

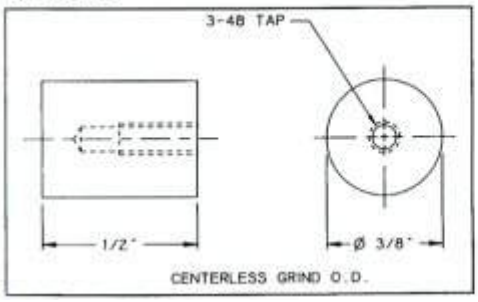
P/N EL400



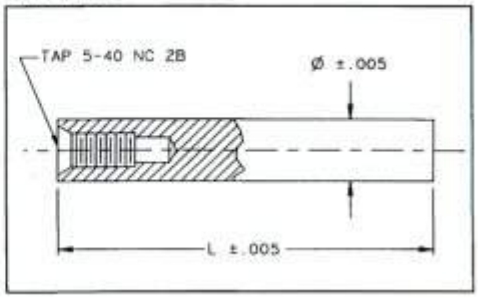
P/N EL405



P/N EL410

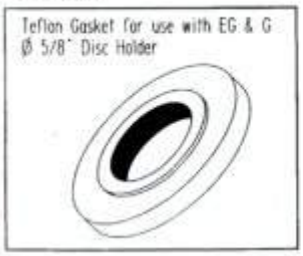


P/N EL412

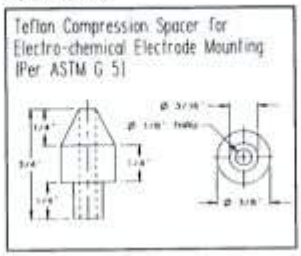


Gaskets Commonly used with Electro-Chemical Apparatus

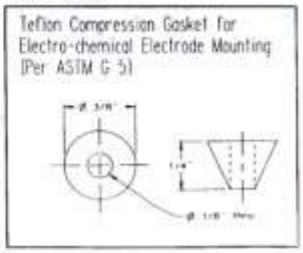
P/N 1399



P/N 2604



P/N 2605



BACK TO LINEAR POLARISATION MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

System Accessories

Cables

- Factory Assembled: For Portable Instrument Series P.N 700716 + Length
  For Transmitter and Data Collection Systems P.N. 700726 + Length
- Cable - Heavy Duty: P.N 700331
  Two wire for transmitter P.N. 700431
- Connectors: Low Pressure Probe Type A P.N. 700521
  System High Pressure Type B P.N. 700343

Probe to Cable Adaptor for 2" High Pressure System

- Portable with Standard 6 pin Connector P.N. 700319
- Portable with Small 6pin ConnectorFixed P.N. 700033
- Fixed Adapter with Standard 6 pin Connector P.N. 700640
- Fixed Adaptor with Small 6pin Connector P.N. 700077

Shield Options

- Standard Shield - Wire Loop Probe - P.N. 700608
- High Velocity Shield - Wire Loop Probe - P.N. 700609
- Standard Shield - Cylindrical Probe - P.N. 700610
- High Velocity Shield - Cylindrical Probe - P.N. 700611
- Coupon Holder Shield - Wire Loop Probe - P.N. 700612
- Coupon Holder Shield - Cylindrical Probe - P.N. 700613

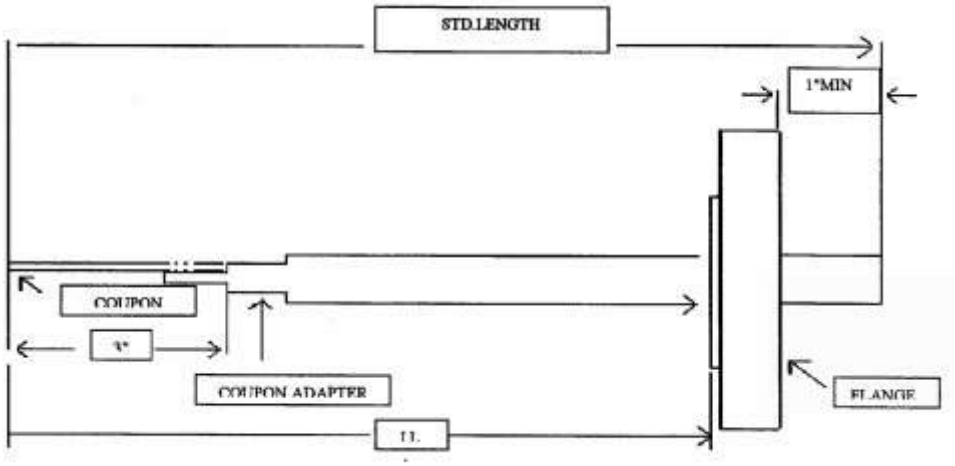
Safety Clamps

- For 18" and 24" Probe lengths P.N. 700700
- For 30", 36" and 42" Probe lengths P.N. 700701

BACK TO LINEAR POLARISATION MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model RT 6000 - Coupon Insertion System
Fixed Length with Flange



Model RT 6000 is a fixed-length, flange-mounted, coupon insertion system. The probe is ideally suited for use in high pressure and/or hazardous applications where threaded fittings are not available or not recommended. Process shutdown or process isolation is required for installation and inspection. The probe assembly consists of an insertion rod with an element and a flange (as specified by customer) which are all welded in place.

Insertion length (I.L.) is calculated to the end of the coupon in this case, is based on a 1 inch total flange thickness. Customers can specify any length required. For standard probes, the maximum insertion length is given in the chart below.

Specifications:	
Probe Body	316 Stainless Steel
Temperature Rating	500° F/260° C.
Pressure Rating	According to Flange Rating
Mounting	Mating Flange

STD. LENGTH	I.L
8"	6”
12"	10”
18"	16”
24"	22”

BACK TO WEIGHT LOSS COUPON MENU
SCROLL DOWN FOR SECOND PAGE

RCSL

ROSE CORROSION SERVICES LIMITED

1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

RT 6000 ORDERING INFORMATION

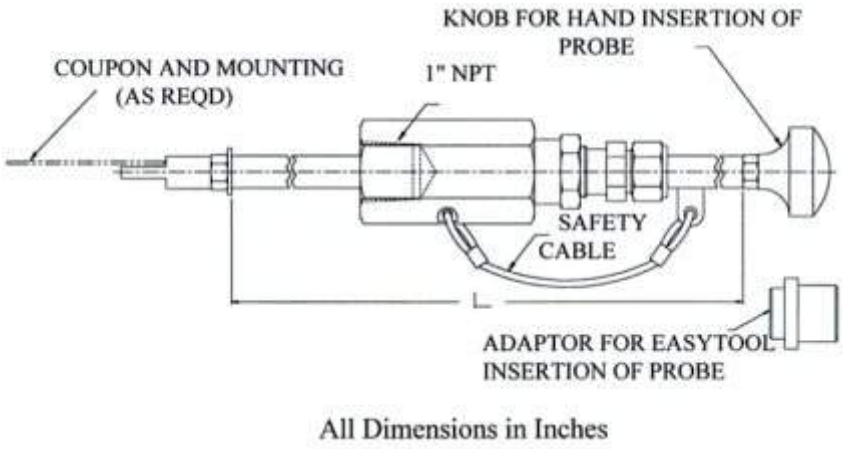
Model						
RT6	Coupon Insertion System with Flange					
	Flange Size					
	1	1 inch Flange				
	2	1.5 inch Flange				
	3	2 inch Flange				
	4	3 inch Flange				
	5	4 inch Flange				
	6	0.5 inch Flange				
	7	6 inch Flange				
		Probe Body Material				
		22	C316			
		44	C276			
			Coupon Options			
			010	Fits P/N C0100		
			030	Fits P/N C0118		
			050	Fits P/N C0111		
			060	Fits P/N C0220		
				Flange Pressure Rating		
				1	150 lb	
				2	300 lb	
				3	600 lb APPEND A FOR RF FLANGES	
				4	1200 lb APPEND B FOR RTJ FLANGES	
				5	1500 lb	
				6	900 lb	
					Length	
					08	06.00 inch max. insertion length
					12	10.00 inch max. insertion length
					18	16.00 inch max. insertion length
					24	22.00 inch max. insertion length
					36	34.00 inch max. insertion length
						FOR LENGTHS OTHER THAN STANDARD INSERT THE ACTUAL LENGTH IN INCHES
RT6	2	22	50	1A	12	Example of Probe Ordering #

For alloys, sizes, or other special requirements not listed, contact our sales department.

BACK TO WEIGHT LOSS COUPON MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model SR4000 - Coupon Insertion System with Packing Gland



All Dimensions in Inches

Model SR4000 coupon insertion systems are retractable and commonly used in high pressure and high temperature applications. A specially designed packing gland is used to insert or retract a coupon from a pressurised system without a process shutdown. The insertion system is designed to mount onto a 1 inch piping system, but can easily be adapted to fit your specific requirements. The system consists of an insertion rod with a coupon holder, and a packing gland. A safety cable and safety nut, are also provided to prevent blowout. Standard packing material in the packing gland is Teflon, however, Graphoil packing can be provided for high temperature applications. Several coupon holders and lengths are available.

Specifications:	
Probe Body	316 Stainless Steel
Temperature Rating	500° F/260° C.
Pressure Rating	1000psi/68 Bar
Mounting	1 inch Full Port Valve (Min)

STD. LENGTH	I.L (max)
18"	11.53”
24"	17.53”
30"	23.53”
36"	29.53”
42"	35.53”

Metal Samples Easy Tool is recommended for probe insertion or retraction in systems with pressure over 150 pounds

BACK TO WEIGHT LOSS COUPON MENU
SCROLL DOWN FOR SECOND PAGE

RCSL

ROSE CORROSION SERVICES LIMITED

1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

SR4000 ORDERING INFORMATION

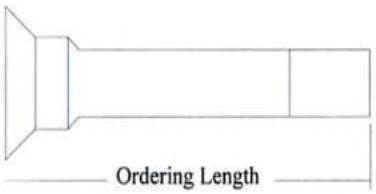
Model					
SR45	Retractable Coupon Insertion System 1 inch Female NPT with Packing Gland				
	Insertion Rod and Mounting Material				
	22	316			
	44	C276			
		Coupon Options			
		010	Fits P/N C0100		
		030	Fits P/N C0118		
		050	Fits P/N C0111		
		060	Fits P/N C0220		
			Length		
			18	12.54 inch max. insertion length	
			24	18.54 inch max. insertion length	
			30	24.54 inch max. insertion length	
			36	30.54 inch max. insertion length	
			42	36.54 inch max. insertion length	
				Coupon Adapter and Insulators	
				1	Coupon adapter same material as rod, teflon insulators.
				2	Teflon coupon adaptor, teflon insulators.
				3	Coupon adapter same material as rod, ceramic insulators.
				4	Coupon adapter same material as rod, nylon insulators.
				5	Nylon coupon adaptor, nylon insulators.
				6	Coupon adapter same material as rod, no insulators.
RT450	22	30	18	1	Example of Probe Ordering #

For alloys, sizes, or other special requirements not listed, contact our sales department.

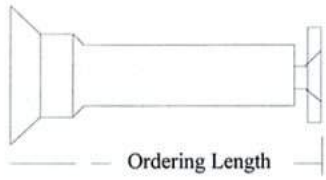
BACK TO WEIGHT LOSS COUPON MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Two-inch System
HC Series Coupon Probes



Strip Coupon Holder



Disc/Flush Disc Coupon Holder

Adjustable Disc/Flush Coupon Holder

HC Series Probes are used in conjunction with the TRISEAL High Pressure Access Fitting Assembly.

The Coupon Probe is attached to the Solid Plug Assembly by means of an O.D. left handed thread connection and also retains the primary packing. Disc Coupon Probes are primarily intended for use in areas where pigging operations prohibit the use of projecting style probes. Additional advantages are the lack of requirement to orient the coupon relative to the flow direction and a greater exposed surface area at the pipe wall. Coupon Probes are manufactured in 316 SS and are available in lengths from 2.50 inches to 36 inches.

To calculate the correct ordering length, use the following formula.

ORDERING LENGTH =P + W + 2.50 inches
where P = Penetration required in pipe
W = Wall thickness of pipe

Note: Formula is based upon a standard access fitting height of 5.25 inches and 0.0625 weld gap per ANSI B31.1.1973.

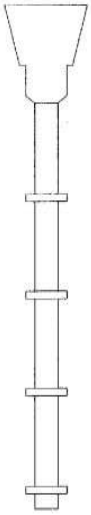
Corrosion Coupons can be supplied in most alloys and are complete with Coupon.

Accessories for Disc Coupon Probe Mounting Kit - P/N 700620 Screw 0.25 - 20.1.00 - St. St. Coupon Insulation Washer Teflon Washer	**Accessories for Strip Coupon Probe** Mounting Kit - P/N 700567

BACK TO WEIGHT LOSS COUPON MENU
SCROLL DOWN FOR SECOND PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Multiple Disc Coupon Holder



Multiple Disc Coupon monitoring is suitable for pipes with I.D. greater than 6.00 inches. Multiple Disc Monitoring permits coupons to be placed at a specific level in multi phase or stratified flow. The coupons are insulated from the probe rod by Nitrile O rings. Delrin or Nylon Spacers are used to provide insulation between coupons. Materials of construction satisfy the requirements of NACE MR-01-75

PROBE SIZING (Flarweld Access Fitting - 5.25 inches Height)
Calculate the Probe length as follows:

L = K + D - W -2.75
L = Probe Holder Length
K = 5.31 (Constant)
D = Pipe O.D.
W = Pipe Wall Thickness

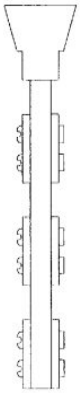
Round down to the nearest 0.125 inches
Rod Length R = L - 1.9375
Coupon Position
Top of Line Coupon C1 = K + W - 3.8125
Middle of Line Coupon C2 = K + D/2 - C1 - 4.125
Bottom of Line Coupon C3 = R - C1 - C2 0.375
C1 + C2 + C3 + 0.375 must equal R (Rod length)

TO ORDER

Determine Rod Length. Order using format detailed in Ordering Chart.

- Determine the length and quantity of coupon to coupon insulation spacers.
- Determine the number of Coupon-Rod Bushings required.

Ladder Strip Coupon Holder



Ladder Strip Coupon Monitoring is suitable for pipes 8 inch O.D. and greater. The probe body is a single blade containing holes spaced along its length for mounting the coupons. A minimum probe length of 26 cm (10.25") is required to mount three pairs of coupons.

PROBE SIZING
Calculate the probe length required as follows:

L = (5.31 + D) - (2.50 + W)
L = Probe Length
D = Pipe O.D.
W = Pipe Wall Thickness

This formula should only be used for Access Fitting Bodies with 5.25 height. For flanged Access Fitting Body installations, please call the sales office.

TO ORDER

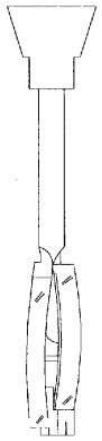
Accessories for Multi Disc Coupon Probe	**Accessories for Ladder Strip Coupon Probe**
Bushing - O Ring Insulation Spacers Available in 0.0625 increments from 1 inch to 2 inches	Mounting Kit - Coupon

BACK TO WEIGHT LOSS COUPON MENU

SCROLL DOWN FOR THIRD PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Multi Stressed Holder



Applied Stress Coupons are 152mm (6 inches) long, 22.3mm (0.875 inches) wide, 3.18mm (0.125 inches) thick. An insulated adjusting screw located on the coupon mid-point applies stress to the coupon.
NOTE: Applied stress coupons have been stamped on the end because this is the lowest stress area and cracking is not expected to be initiated by the identification mark.

Applied stress is determined from the number of adjusting screw turns or bending deflection. The coupons are first stressed and then installed in the line. The time required for cracks to develop is determined by pulling coupons at regular intervals, usually 24 hours to 30 days. Test duration will vary with the stress level applied to the coupon. The time to crack may then be used as a measure of stress corrosion resistance.

Test start time begins when stress is applied and the stressed coupon is exposed to the corrosive environment, whichever occurs later. The coupon is considered to have failed when cracks appear. The cracks may be detected by optical, mechanical or electrical means.

Cracking time is the elapsed time from test start until the appearance of cracks.
Formula for Applied Stress Coupons
$S = 6Ety/H$
Where:
S = maximum tensile stress
E = modulus of elasticity
t = thickness of coupon
y = maximum deflection

The formula is for longitudinal stress in the outer fibres of the coupon, below the elastic limit of the material. At stress above the elastic limit, but below the yield strength at 0.2% error results. The formula must not be used above the yield strength of the material.
NOTE: The formula is based on small deflections i.e. y/H is less than 0.1.

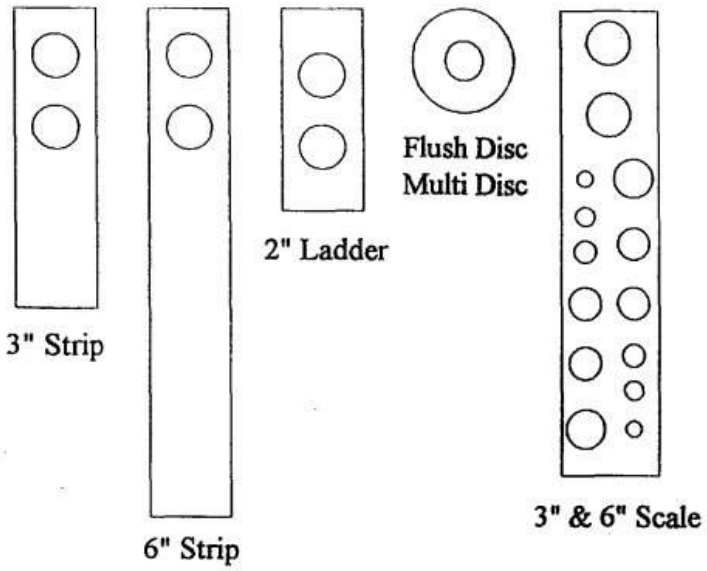
HIGH PRESSURE COUPON HOLDER ORDERING INFORMATION CHART

HC	X	X	X	XX.XX
	COUPON TYPE 1 - Strip coupon 2 - Ladder Strip 3 - Flush Disc Fixed 4 - Flush Disc Adj. 5 - Multi Disc 6 - Single Prestressed 7 - Multi Prestressed	PROBE TYPE 1 - Welded 2 - Non Welded	PROBE ALLOY 1 - 316 SS 2 - Hastelloy C276	PROBE LENGTH 2” to 40” in 1/8” Increments. For Flush Disc Adjustable put “VA.RY”.

BACK TO WEIGHT LOSS COUPON MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Coupon



Coupons are supplied ready for use.

- C1018 coupons are stamped with a sequence number. All alloy coupons are stamped with the alloy and sequence number.
- Coupons are pre-weighed and individually packaged in a Data Front VCI bag.
- Coupons are supplied with a mill test report and a weight log chart.
- Coupons are cleaned of all contaminants and have a sand blasted finish.
- Nylon insulators are mounted into coupons.

ORDERING INFORMATION

	XXX	XXXX	=Ordering Number
	|	|	
Coupon	Part Number	Material Code	Material Code
3 inch Strip	111	01 - 1018 C.S.	A - 5LX52
6 inch Strip	169	02 - 304 S.S.	B - 5CT L80 -1
2 inch Ladder	197	03 - 304L S.S.	C - 5CT N80
Flush Disc	142	04 - 316 S.S.	D - A333 Gr3
Multi Disc	141	316L S.S.	E - 5LX65
3 inch Scale	185	06 - 410 S.S.	F - UNS 2205
6 inch Scale	196	07 - 5LGrB	G - 70/30 CuNi
		08 - A106 GrB	H - 90/10 CuNi
		09 - A33GrB	
Example: P/N 111-1018 is a 3 inch Strip Coupon in C1018 C.S.			

BACK TO WEIGHT LOSS COUPON MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Two-inch System

Standard Coupons	Special Corrosion Coupons
6 Inch Strip Coupons: This coupon is used when a larger exposed area is required. The exposed surface area is 73.5cm 2(11.4 inch^2). Dimensions 152 x 22 x 3.2mm (6 inch x 0.875 inch x 0.125 inch). The coupon has two mounting holes.	**Pre-stressed Coupons:** are used where sulfide stress corrosion cracking is a factor. Pre-stressed coupons come in two sizes: 6 inch for single coupon and 4 inch for the multiple type.
3 Inch Strip Coupons: 76.3 x 22 x 3.2mm (3inch x 0.875inch x 0.125inch) with two mounting holes and have an exposed surface area of 35.35cm^2 (5.47in^2).	**Ladder Stripped Coupons:** are designed for simultaneous corrosion monitoring at top, middle and bottom positions in a pipeline. Dimensions 51 x 22 x 32mm (2inch x 0.875inch x 0.125 inch) with two mounting holes. The exposed surface area is 21cm^2 (8.27in^2)
Flush Disc Coupons: dia. 31.8 x 3.2mm (dia. 1.25 inch x 0.125 inch) are utilised where the coupons should not extend into the pipe or interfere with the media flow or pig passage. The exposed area is about 17cm^2 (2.6 in^2).	**Scale Coupons:** are of the same size as the 3inch strip coupon, but has a series of holes of different size range. Scale usually forms on cavities therefore it is likely to form on small sized holes.
Disc Coupons: Are utilised for stacked multiple phase monitoring when the line diameter is 6 inches or more. For pipelines less than 6 inches it is recommended to use single disc. Dimensions dia. 31.8 x 3.2mm (dia. 1.25 inch x 0.125 inch). The exposed surface area is about 17cm 2 (2.6 inch^2).	**Residual Stress Coupons:** are rectangular coupons similar to the 3 inch strip coupons, but are deformed to create residual stress. This type of coupon stimulates any corrosion effect due to the residual stress present in combination with an embrittling environment.
Rod Coupons: This is a rod protruding into the product flow. Standard rods are available in a size of 101.6 x dia. 6.35mm. (4 inch x 0.25 inch dia.). One end of the rod is threaded with 0.25inch UNC to screw the rod into the holder. The exposed area is about 21.09cm^2 (3.27in^2).	**Crevice Corrosion Coupons:** are made from the standard Disc Coupon, dimensions 31.8 dia. x 3.2mm (1.25 inch dia. x 0.125 inch) with a nylon disc on each side held in position by a stainless steel screw.

BACK TO WEIGHT LOSS COUPON MENU

RCSL

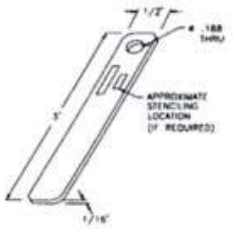
ROSE CORROSION SERVICES LIMITED

1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Standard Coupon Specifications

Accurate monitoring of corrosion rates in any environment is critical when viewed in terms of the maintenance and repair costs associated with corrosion and material failure. Test coupons can provide an inexpensive means of effectively monitoring corrosion levels in a system. By observing the mils-per-year corrosion rate of an exposed coupon, valuable information can be provided regarding the material's life expectancy. The following coupons are commonly used in corrosion testing. Rose Corrosion Services can supply specimens in any size, shape or material you need.

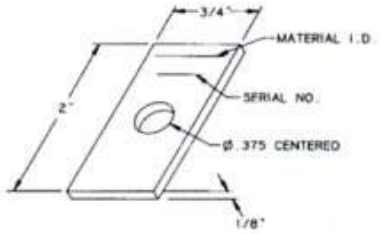
P/N CO100



1/16" THICK COUPON

Shape:	Rectangular
Finish:	Double disc or glass bead.
Indentification:	Stencilled-alloy, heat no sequence.
Mounting Hole:	Drilled/Laser Cut Laser Cut/Punched
Cutting:	

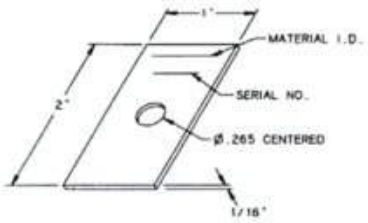
P/N CO131



1/8" THICK COUPON

Shape:	Rectangular
Finish:	120 grit, glass bead or mill.
Indentification:	Stencilled-alloy, heat no sequence.
Mounting Hole:	Drilled/Laser Cut
Cutting:	Saw Cut/Laser Cut

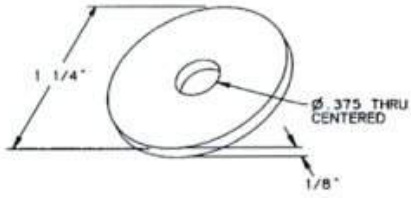
P/N CO146



1/16" THICK COUPON

Shape:	Rectangular
Finish:	Glass bead or mill.
Identification:	Stenciled-alloy, heat no sequence.
Mounting Hole:	Punched/Laser Cut
Cutting:	Laser Cut/Sheared

P/N CO220



1/8" THICK COUPON

Shape:	Circular
Finish:	120 grit, glass bead or mill.
Identification:	Stenciled-alloy, heat no sequence.
Mounting Hole:	Drilled/Laser Cut
Cutting:	Turned/Laser Cut

Coupons can be furnished with a variety of finishes depending on your particular application. Some of the typical finishes are defined below:

- **Mill** - finish as produced from mill.
- **Glass Bead** - blasted with fine glass beads to remove mill scale.
- **120 Grit** - fine finish using a 120 grit belt and commonly used in corrosion tests, such as pitting studies, where smooth surface finish is desired. Finishes up to 800 grit (extremely fine) can be provided by using belt sanders.
- **Double Disc Ground** - extra fine finish using an abrasive disc that leaves minimal residual grit. Excellent for studies where surface finish is critical. Capable of producing 16-32 RMS finishes on common steels and 8 RMS on carbide steels.

BACK TO WEIGHT LOSS COUPON MENU

RCSL

ROSE CORROSION SERVICES LIMITED

1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Corrosion Test Supplies for the Water Treating Industry

Rose Corrosion Services Ltd. provides the water treatment industry with a wide assortment of corrosion test supplies. We specialise in expeditious order processing of test coupons made according to your needs for material, size, shape and finish. Coupons can be stenciled with alloy and sequence numbers for proper identification, and the pre-weighed and measured to help assure the integrity of your test data.

STANDARD WATER TREATING COUPONS*

P/N	SIZE	HOLE	HOLE LOCATION	AREA IN SQ.IN
CO100**	½" x 3" x 1/16"	3/16"	¼" fr.end	3.38
CO101	1" x 2" x 1/16"	3/16"	¼" fr.end	4.32
CO102	½" x 3" x 1/16"	9/64"	⅛" fr.end	3.41
CO103	½" x 3" x 1/16"	¼"	¼" fr.end	3.34
CO104	½" x 3" x 1/16"	(2) ¼"	½" fr.end	3.24
CO105	½" x 3" x 1/16"	3/16"	½" fr.end	3.38
CO106	½" x 3" x 1/16"	¼"	½" fr.end	3.34
CO115***	½" x 3" x 1/16"	¼"	¼" fr.end	
CO117	⅜" x 3" x 1/16"	9/64"	⅛" fr.end	2.64
CO118	½" x 3" x 1/16"	(2) ¼"	¼" and ¾" end	3.24
CO120	⅜" x 3" x 1/16"	(2) ¼"	¼" and ¾" end	2.48

*Table refers to standard water treating coupons made from C1010 material.
**Standard P/N CO100 comes with rounded corners.

STANDARD PIPE PLUG ASSEMBLIES

P/N	CARBON STEEL OR PVC PLUG	3" (std) STEM	MATCH WITH COUPON NUMBER
2077NA	¾" NPT	Nylon	CO102,CO117
2079NA	1" NPT	Nylon	CO102,CO117
2077TA	¾" NPT	Teflon	CO102,CO117
2079TA	1" NPT	Teflon	CO102,CO117
2078NA	¾" NPT	Nylon	CO100,CO103,CO115
2081NA	1" NPT	Nylon	CO100,CO103,CO115
2078TA	¾" NPT	Teflon	CO100,CO103,CO115
2081TA	1" NPT	Teflon	CO100,CO103,CO115
2087NA	¾" NPT	Nylon	CO118,CO120
2088NA	1" NPT	Nylon	CO118,CO120
2087TA	¾" NPT	Teflon	CO118,CO120
2088TA	1" NPT	Teflon	CO118,CO120
2084NA	¾" NPT	Nylon	CO105,CO106
2075NA	1" NPT	Nylon	CO105,CO106
2084TA	¾" NPT	Teflon	CO105,CO106
2075TA	1" NPT	Teflon	CO105,CO106
2092NA	½" NPT	Nylon	CO100,CO103,CO115

A variety of plug sizes and stem lengths are available.

CYLINDRICAL COUPONS (C1018 STD)

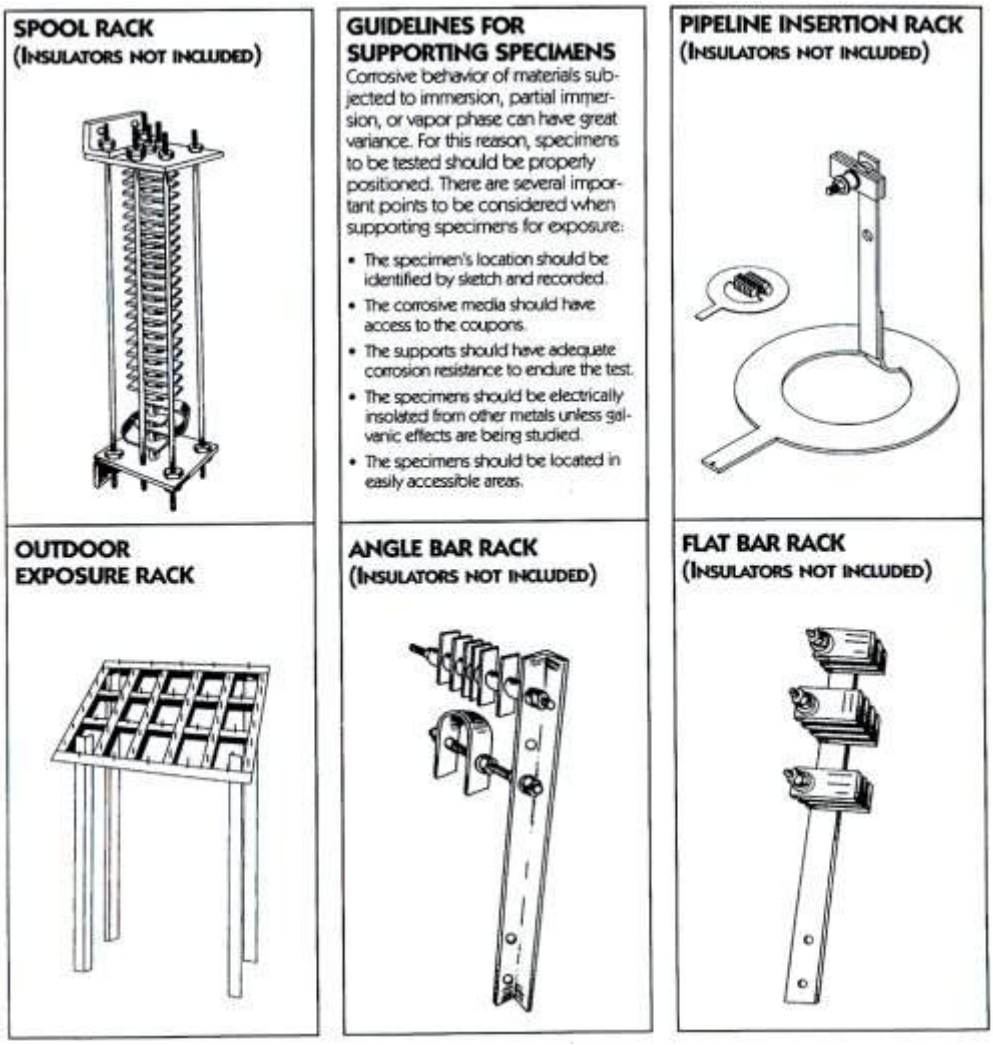
P/N	SIZE	THREAD	SLOT
ES200	¼" x 2.5"	¼"-20 x 3/8"	1/16"
ES201	¼" x 2"	¼"-20 x 3/8"	1/16"
ES202	¼" x 3"	¼"-20 x 3/8"	1/16"
ES204	¼" x 1 ½"	¼"-20 x 3/8"	1/16"

BACK TO WEIGHT LOSS COUPON MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Corrosion Test Supplies for the Water Treating Industry
TEST RACKS

- Specimen Exposure racks are used to mount test samples and secure them directly to operating equipment within the industrial environment. The usage helps eliminate coupon loss which might occur if samples were individually placed in the process flow. Rack usage also allows samples of differing alloys and materials to be studied in the same test.



BACK TO WEIGHT LOSS COUPON MENU

RCSL

ROSE CORROSION SERVICES LIMITED

1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND

TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

ALLOYS AVAILABLE

Coupons are available in the following allows. Please call for pricing.

UNS	MATERIAL	DENSITY (g/cm³)
ALUMINUM & ALUMINUM ALLOYS		
A91050	Al 1050	
A91060	Al 1060	2.70
A91100	Al 1100	2.71
A91145	Al 1145	
A92011	Al 2011	2.82
A92014	Al 2014	2.80
A92017	Al 2017	
A92024	Al 2024	2.77
	Al 2024 ALCLAD	
A92036	Al 2036	
A92090	Al 2090	
A92219	Al 2219	
A93003	Al 3003	2.73
A93004	Al 3004	
A94043	Al 4043	
A95005	Al 5005	2.70
A95050	Al 5050	2.69
A95052	Al 5052	2.68
A95083	Al 5083	2.66
A95086	Al 5086	2.65
A95154	Al 5154	2.66
A95182	Al 5182	
A95254	Al 5254	
A95257	Al 5257	
A95454	Al 5454	2.68
A95456	Al 5456	2.66
A95652	Al 5652	
A96061	Al 6061	2.70
A96063	Al 6063	2.70
A97039	Al 7039	
A97050	Al 7050	
A97075	Al 7075	2.80
	Al 7075 ALCLAD	
A97178	Al 7178	2.82
A07720	AA 772.0	
A03190	AA 319	2.79
A03191	Al 319.1	
A03192	Al 319.2	
A03330	Al 333	
A03331	Al 333.1	
A03550	AA 355	2.71
A03552	Al 355.2	2.68
A03561	Al 356.1	
A03562	AA 356.2	2.68
A03600	Al 360	
A03800	Al 380	
A03900	Al 390	
A04432	AA 443.2	
A05142	Al 514.2	

UNS	MATERIAL	DENSITY (g/cm³)
A05352	Al 535.2	
	MD 230	
COPPER & COPPER ALLOYS		
C10100	CDA 101 OFE	8.89
C10200	CDA 102 OF	8.89
C10300	CDA 103	8.89
C11000	CDA 110 ETP	8.89
C11400	CDA 114 STP	
C12200	CDA 122 DHP	8.94
C15100	CDA 151	
C17200	CDA 172	8.93
C17300	CDA 173	
C18200	CDA 182	
C19400	CDA 194	
C19500	CDA 195	
C22000	CDA 220	8.80
C23000	CDA 230 Red Brass	8.75
C26000	CDA 260 Cartridge Brass	8.53
C26800	CDA 268 Yellow Brass	8.47
C27200	CDA 272	
C27400	CDA 274	
C28000	CDA 280 Muntz Metal	8.39
C31600	CDA 316	8.83
C33000	CDA 330	
C34500	CDA 345	
C35300	CDA 353	
C36000	CDA 360 FC Brass	8.49
C36500	CDA 365	
C44300	CDA 443 Admiralty Brass	8.52
C46400	CDA 464 Naval Brass	8.41
C48500	CDA 485 Leaded Naval Br.	8.44
C51000	CDA 510 Phos. Bronze	8.86
C51900	CDA 519	
C52100	CDA 521	
C61000	CDA 610	
C61300	CDA 613	
C61400	CDA 614 Al Bronze	
C62300	CDA 623	
C62400	CDA 624	
C62500	CDA 625	
C63000	CDA 630 Al Bronze	7.58
C63200	CDA 632	
C64200	CDA 642 Al Bronze	7.69
C65100	CDA 651	
C65500	CDA 655 High Silicon	8.52
C67300	CDA 673	
C67400	CDA 674	
C67500	CDA 675 Mn Bronze A	8.63
C67810	CDA 678	

UNS	MATERIAL	DENSITY (g/cm³)
C68700	CDA 687 Al Brass	8.33
C70440	CDA 704 (95/5)	
C70610	CDA 706	8.94
C71000	CDA 710 (80/20)	8.94
C71500	CDA 715 (70/30)	8.94
C72200	CDA 722	
C75200	CDA 752	
C83600	CDA 836	8.80
C83800	CDA 838	
C84400	CDA 844	
C84500	CDA 845	
C85200	CDA 852	
C85400	CDA 854	
C85700	CDA 857	
C86200	CDA 862	
C86300	CDA 863	
C86400	CDA 864	
C87500	CDA 875	
C90300	CDA 903 Tin Bronze	
C90500	CDA 905	8.73
C90700	CDA 907	
C91600	CDA 916	
C92200	CDA 922	
C92700	CDA 927	
C93200	CDA 932	8.91
C93700	CDA 937	
C94400	CDA 944	
C95300	CDA 953	
C95400	CDA 954	
C95500	CDA 955	
C95800	CDA 958	
C96200	CDA 962	
C96400	CDA 964	
C97800	CDA 978	
	K-COOPER	
	INOX3P	
CARBON & ALLOY STEELS		
G10050	C1005	
G10080	C1008	
G10090	C1009	
G10100	C1010 Mild Steel	7.87
G10150	C1015 Mild Steel	7.87
G10180	C1018 Mild Steel	7.87
G10200	C1020 Mild Steel	7.87
G10260	C1026 Mild Steel	7.87
G10350	C1035	
G10400	C1040	
G10490	C1042	
G10450	C1045	

BACK TO WEIGHT LOSS COUPON MENU

SCROLL DOWN FOR SECOND PAGE

RCSL

ROSE CORROSION SERVICES LIMITED

1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND

TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

ALLOYS AVAILABLE (Cont.)

Coupons are available in the following allows. Please call for pricing.

UNS	MATERIAL	DENSITY (g/cm³)
G10500	C1050	
G10600	C1060	
G10740	C1074	
G10750	C1075	
	C1076	
G10800	C1080	
G10950	C1095	
G11170	C1117	
	C11L17	
G11370	C1137	
G11410	C1141	
G11440	C1144	
G12144	C12L14	
G12150	C1215	
	C15830	
G41300	C4130	7.85
	C4130X	7.85
	C4130MOD	
G41400	C4140	7.85
	C4140C	
	C4140D	
	C41L40	
	C41L50	
G41420	C4142	
G41500	C4150	
G43300	C4330	7.85
	C4330V	
G43400	C4340	7.84
	C4340A	
	C4340B	
G52986	C52100	
G86200	C8620	
G86300	C8630	
G87400	C8740	
G93106	C9310	
K01200	A179	
K01201	A192	
K01800	A516 Gr 55	
	A213	
K01807	A214	
K02100	A516 Gr 60	7.60
K02303	A572 Gr 50	
K02400	A537 CL1	
K02401	A515 Gr 60	
K02504	A53 Gr A	
K02600	A36	7.60
K02700	A516 Gr 70	7.60
K02801	A285 Gr C	7.60
K03000	A500 Gr B	
K03005	A53 Gr B	7.60

UNS	MATERIAL	DENSITY (g/cm³)
K03006	A333 Gr 6	
K03009	A350 Lf 1	
K03101	A515 G 70	7.60
K03300	A455	
K02707	A210 Gr A1	
K03501	A210 Gr C	
K03502	A181 Gr 2	
K03504	A105	8.00
K03506	A266 CL 2	
K11430	A588 Gr A/COR-TEN B	7.60
K11510	A242 Type 1/COR-TEN A	7.89
K11547	A213 T2	
K11579	A182 F11(1 1/4 Cr, 1/2 Mo)	7.86
K11597	A213 T11	
	A513	
K11662	A514 Gr D	
K11757	A387 F12	
K11789	A387 F11	
K11804	A656 Gr 80	
	A694 Gr 52	
K11820	A204 Gr A	
K11856	A514 Gr A	
K12020	A204 Gr B	
K12022	A302 Gr B	
K12023	A209 T1a	
K12045	A541	
K12211	A441	
K12521	A533 Gr A	
K12539	A533 Gr B	
K12542	A202 Gr B	
K12766	A508 Class 2	
K13050	A350 Lf 5	
K13502	A508 CL1	
K20747	A710 Gr A	
K21590	A182 F22(2 1/4 Cr, 1 Mo)	7.86
K22375	A508 Class IV	
K24728	A355 Gr A	
K31820	HY80	
K32018	A203 Gr E	
K32045	HY100	
	HY130	
K41545	A387 F5	
K42544	A182 F5a(5 Cr, 1/2 Mo)	7.78
K81340	A553	
	A569	
	A606	
	A610	
	A611	7.87
K90941	A182 F9(9 Cr, 1 Mo)	7.67
N08705	HP	

UNS	MATERIAL	DENSITY (g/cm³)
	HP50	
K91283	HP 9-4-30	
K92890	Nimark 250	
	A120	
	A283 Gr C	7.60
	A366	
S50300	A182 F7	7.78
S50400	A199T9	
S50200	A387 Gr 5	
	Manganese Steel	
K44220	300M	
	COATED, PLATED OR SPECIAL CONDITIONED STEELS	
	Aluminized Steel	
	Caroline 505	
	Chrome Plated Steel	
	Galvanized 56	
	Galvanized Steel	
	Terne Steel	
	Tin Plated Carbon-Steel	
	Tin Plated Steel	
	HEAT & CORROSION RESISTANT STEELS INCLUDING STAINLESS STEELS	
S13800	13-8 PH Mo	
S15500	15-5 PH	7.80
S15700	15-7 PH Mo	7.80
	15B30	
S17400	17-4 PH	7.80
S17700	17-7 PH	7.80
K14675	17-22A	
K23015	17-22AS	
	18SR	
S16100	CROLOY 16-1	
S20100	201L	7.94
S20300	203	
S30100	301	7.90
S30200	302	7.94
	302 HQ	
S30300	303	7.90
	303 (P-70)	
S30323	303Se	
S30400	304	7.94
S30403	304L	7.94
S30409	304H	
	304 .25%B	
	304 1%B	
S30451	304N	
S30453	304LN	

BACK TO WEIGHT LOSS COUPON MENU

SCROLL DOWN FOR THIRD PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

ALLOYS AVAILABLE (Cont.)

Coupons are available in the following allows. Please call for pricing.

UNS	MATERIAL	DENSITY (g/cm³)
S30800	308	8.00
S30883	308L	
S30900	309	7.98
S30908	309S	
S31000	310	7.98
S31008	310S	7.98
S31009	310H	
S31600	316	7.85
S31603	316L	7.98
	316LM	7.98
S31653	316LN	
S31635	316Ti	7.98
S31700	317	7.98
S31703	317L	7.98
S31725	317LM	7.98
S31753	317LN	7.90
	317LNMo	7.98
S32100	321	7.90
S32900	329	7.98
N08330	330	8.03
N06333	333	8.24
S34700	347	8.03
S34800	348	
S40300	403	7.70
S40500	405	7.80
	406A1	
	406A2	
	406A4	
S40900	409	7.64
S41000	410	7.70
S41008	410S	
S41600	416	7.70
S41800	418	
S42000	420	7.70
S42020	420F	
S42200	422	
S43000	430	7.72
S43036	430Ti	
S43100	431	7.73
S43700	437	
S43035	439	7.64
S44002	440A	7.70
S44004	440C	7.70
S44100	441	
S44400	444	
S44600	446	7.65
N08904	904L	8.00
	904LN	
S21460	XM-14 (Tenelon)	
S38100	XM-15	

UNS	MATERIAL	DENSITY (g/cm³)
S66286	A-286	7.90
S35000	AM 350	7.81
S35500	AM 355	7.91
	AM 363	
	Maraging 250	
	Maraging 300	
	Maraging 350	
	NICKEL ALLOYS	
N99645	Colmonoy 45	
N99646	Colmonoy 46	
N13100	IN 100	
N06003	Nichrome 5	
N06004	Nichrome 60	
N06008	Nichrome 70	
	Nimonic 105	
	Nichrome 3228	
	PURE METALS	
	Berium B10	
	Cadmium	8.65
R2XXXX	Chromium	7.19
R30XXX	Cobalt	8.85
	Copper	8.89
P00020	Gold (99.95)	18.88
	Hafnium	13.10
	Indium	
	Iron	7.87
	Lead	11.35
MIXXXX	Magnesium	1.74
	Manganese	7.21/7.44
R03XXX	Molybdenum	10.22
	Nickel	8.57
	Niobium	8.57
P03980	Palladium	12.02
P04995	Platinum	21.45
	Silicon	2.33
P07010	Silver	10.50
R05XXX	Tantalum	16.65
	Tin	7.30
R07005	Tungsten	19.30
	Vanadium	
	Zinc	7.13
	MAGNESIUM ALLOYS	
M10410	Magnesium AS41A	
M11311	Magnesium AZ31B	
	Magnesium WE43	
	Magnesium ZC71	
M11910	Magnesium AZ91A	

UNS	MATERIAL	DENSITY (g/cm³)
M12330	Magnesium EZ33A	
M16400	Magnesium ZK40A	
M16410	Magnesium ZE41A	
	REACTIVE & REFRACTORY METALS	
	Colubium 85	
	Tantaloy "60"	
	Tantaloy "63"	
	60/Ta-40/Co	12.10
R03640	Molybdenum (TZM)	10.22
R30003	Elgiloy	8.30
R30035	MP35N	8.91
	Ti Beta 21S	
	Ti Di-Boride	
R50250	Ti Gr 1	4.52
R50400	Ti Gr 2 (cp)	4.52
R58010	Ti 3-11-13	
R50700	Ti Gr 4	
R54521	Ti 5-2.5	
R56210	Ti 6-2-1-1	
R54620	Ti 6-2-2-4	
R56401	Ti 6-4ELI	
R56260	Ti 6-6-2-4	
R56400	Ti Gr 5 (6 Al, 4 V)	4.43
R52400	Ti Gr 7	4.52
R54810	Ti 8-1-1	
	Ti Gr 9	4.52
R52250	Ti Gr 11	4.52
R53400	Ti Gr 12	4.43
	Ti 15-3-3-3	
	Ti 25MO	
	Ti Gr 444	
	Ti Gr 450	
	Ti Gr 479	
R58640	Beta C-Ti	4.82
	HD17 Tungsten	
	KBI 40	
	KBI 41	
	Tribocor 532	
R60702	Zirconium 702	6.10
R60704	Zirconium 704	6.52
R60705	Zirconium 705	6.51
R60802	Zircalloy II	6.56
R60804	Zircalloy IV	6.56
	SOLDERS	
L50113	2.5 Sn/97 Pb/.5 Ag	
L50750	Calcium Sn Pb	
L51120	Lead (Chemical)	
L52605	Lead with 1% Sb	

BACK TO WEIGHT LOSS COUPON MENU

SCROLL DOWN FOR FOURH PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

ALLOYS AVAILABLE (Cont.)

Coupons are available in the following allows. Please call for pricing.

UNS	MATERIAL	DENSITY (g/cm³)
L52901	Lead with 4% Sb	
L53105	Lead with 6% Sb	
L54320	5 Sn/95 Pb	11.00
	3 Sn/97 Pb	
L54520	10 Sn/90 Pb	10.90
L54710	20 Sn/80 Pb	10.20
L54820	30 Sn/70 Pb Alloy A	
L54821	30 Sn/70 Pb Alloy B	
L54822	30 Sn/70 Pb Alloy C	
L54915	40 Sn/60 Pb	9.31
L55030	50 Sn/50 Pb	8.89
	60 Sn/40 Pb	8.42
	70 Sn/30 Pb	
	92.5 Sn/7 Pb/.5 Ag	
P07500	Silver Solder B AG1A	
P07501	Silver Solder B AG3	
P07720	Silver Solder B AG8	
	Anti-Friction Babbit	
	DZL Tin Babbit	
	Modine	
	Lead Babbit	
	Tin Babbit	
	ZAMAK 3	
	ZAMAK 5	
	TOOL STEELS	
T11302	M2	8.16
T11304	M4	
	M35-1	
T11342	M42	
T11350	M50	
	M509	
T12001	T1	8.67
T20811	H11	
T20812	H12	
T20813	H13	7.79
T20821	H21	
T30102	A2	7.86
T30106	A6	
T30110	A10	
T30402	D2	7.76
T30404	D4	
T30407	D7	
T31501	O1	
T31502	O2	
T31506	O6	
T41901	S1	
T41905	S5	
T41906	S6	
T41907	S7	

UNS	MATERIAL	DENSITY (g/cm³)
T51620	P20	
T61206	L6	7.86
T72301	W1	
	CPM10V	
	AZ	
	CRB-7	
T20813	H13	7.79
	M73	
	Silicon Corbide	
	KZ-84 Carbide	
	KZ-94 Carbide	
	Titanium Carbide	
	Tungsten-Carbide C-2	14.85
	Tungsten-Carbide 6% NI	
	Tungsten-Carbide 8% CO	
	Tungsten 2% TH	
	NON-METALS	
	ABS	
	Acetal	
	Acrylic	
	AD85 Ceramic	
	Buna-N	
	Butyl Rubber	
	Ceramic	
	Chlorobutyl	
	Clear Vinyl	
	CPVC	
	Cured Rubber	
	Delrin	
	Delrin Black	
	EPDM-42	
	EPDM-60	
	EPDM-70	.86
	EPDM-80	
	Ethylene Propylene Teropolymer	
	FRP	
	Graphitar 14	
	Graphite	1.91
	Halar	
	Hypalon	
	Kalrez	
	Kanthal A1	
	Kanthal D	
	Kel-F	
	Kynar	1.75
	Lexan	1.20
	Neoprene	1.40
	NORYL EN-265	
	Nylatron GS	

UNS	MATERIAL	DENSITY (gm³)
	Nylon	
	Nylon 66	
	Nylon 101	
	Penlon	
	Phenolic	
	Plexiglass	
	Polstyrene	
	Polyamide-Nylon	
	Polycarbonate	
	Polyetheretherkeytone (PEEK)	
	Polyethylene-Crosslink	
	Polyethylene-High density	.952
	Polyethylene-Low density	.923
	Polyethylene-UHMW	
	Polyprophylene	.905
	Polyurethane	
	Polyvinylchoride (PVC)	1.39
	Porcelain CTD	
	PVA	
	PVCCL	
	Pyrex	
	Quartz	
	Roulon	
	Rubber	
	Ryton	
	Si C Ceramic	
	Si C Hexaloy	
	Silicon Lump	
	Silicon Rubber	
	Teflon	2.16
	Teflon FEP	
	Teflon GL/F	
	Teflon PFA	
	Teflon PTFE	
	Tefzel	
	Ultra High Molecular Polyethlene	
	Viton	
	Viton A	
	Viton B	
	MISCELLANEOUS CAST ALLOYS	
	128 Gr C	
	422	
	ABEX-SPA	
	ABEX-HC-250	
	Alloyco N-3	
F10005	Grey Cast Iron G-2 C50	
F11401	Grey Cast Iron CL20	
F12101	Grey Cast Iron Type G-1 CL30	
F12401	Grey Cast Iron CL35	6.97

BACK TO WEIGHT LOSS COUPON MENU
SCROLL DOWN FOR FIFTH PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

ALLOYS AVAILABLE (Cont.)

Coupons are available in the following allows. Please call for pricing.

UNS	MATERIAL	DENSITY (g/cm³)
F12801	Grey Cast Iron Type G-2 CL40	
F13502	Grey Cast Iron CL50	
F32800	Ductile Cast Iron Type 60-40-18	
F33100	Ductile Cast Iron Type 65-45-12	
F33107	Ductile Cast Iron Type 60-45-10	
	Ductile Cast Iron Type 70-50-05	
F33800	Ductile Cast Iron Type 80-55-06	
F45000	A532 CLI Type A	
F45003	A532 CLI Type D	
F45009	A532 CL3	
F43010	A571	
J91309	A128 GRC	
J02502	A218 WCA Cast Steel	
J03002	A216 WCB Cast Steel	
J42045	A217-C5	
J22000	A217-WC5	
J03000	A27 GR60-30	
J03001	A27 GR65-35	
J02501	A27 GR70-40	
J03008	B STEEL	
J91150	CA-15	7.61
J91540	CA-6NM	
J92110	CB-7Cu2	
J92200	CB-7Cu1	
J92600	CF-8	7.75
J92602	CF-20	7.75
J92700	CF-3	
J92701	CF-16F	7.75
J92710	CF-8C	7.75
J92800	CF-3M	7.75
J92900	CF-8M	7.75
J93000	CG-8M	7.75
J93370	CD-4MCu	7.81
J95150	CN-7M	8.00
N06040	CY40	
N02100	CZ100	
	CW2M	
	CW12M	
	CW6MC	
	CW7M	
S45100	F6NM	
J93005	HD	
J93403	HE	
J92603	HF	
J93503	HH	
J94204	HK40	
J94224	HK50	
J94605	HT	
	N7M	
	N12M	

UNS	MATERIAL	DENSITY (g/cm³)
	NI HARD I	
	NI HARD IV	
	NIRESIST Type 1	7.32
	NIRESIST Type 2	
	NIRESIST Type 2B	
J03006	WPB	
	MISCELLANEOUS PIPE ALLOYS	
K03006	A106 GrB	
	A178	
	AP15LX-42	
	AP15LX-52	
	AP15LX-60	
	AP15LX-65	
	AP15LX-70	
	API Gr5L (ASTM A53)	7.87
	C56	
	C75	
	C90	
	C95	
	J55	7.86
	K55	7.86
	L80	7.86
	N80	7.86
	P105	
	P110	
	Q125	
	Zeron 100	
	ALLOYS LISTED BY TRADEMARK	
	Coupons are available in the following alloys. Please call for pricing.	
	AL TECH SPECIALTY STEEL CORP.	
S20300	203 EZ	
S30200	302	7.94
	303 EZ	
S30400	304	7.94
S30403	304L	7.94
S30900	309	7.98
S31000	310	7.98
S31600	316	7.98
	316 C	
S32100	321	7.90
S34700	347	8.02
S41000	410	7.70
	416 EZ	
	416 F	
S42000	420	7.70
S43000	430	7.72

UNS	MATERIAL	DENSITY (g/cm³)
S43020	430 F	7.70
S44004	440 C	7.75
	AL630-17Cr 4Ni	
	418 Special	
	ALLEGHENY LUDLUM CORPORATION	
N06002	ALTEMP® HX	8.26
S15500	AL 15-5™	
S15700	AL 15-7™	
S17700	AL 17-7™	7.80
N08904	AL-904L™	8.00
N08366	AL-6X	
N08367	AL-6XN®	8.04
N08020	AL 20™	7.85
S44400	18Cr2Mo	7.80
S44627	E-BRITE®	7.67
S44700	AL 29-4®	7.79
S44735	AL 29-4C®	7.65
S44800	AL 29-4-2®	7.70
S31725	317LX™	8.00
S31726	317LXN™	8.00
	ALFA I™	7.38
	ALFA II™	7.34
	ALFA IV™	7.23
S66286	ALTEMP® A-286	7.96
N02201	AL 201™	8.90
S66286	AL 276™	8.90
S35000	AM 350™	7.81
S35500	AM 355™	7.91
S43035	439	7.68
S40900	409	7.72
N06600	AL 600™	8.42
N06601	AL 601™	8.05
N06625	ALTEMP® 625	8.40
N07718	ALTEMP® 718	8.23
N08800	AL 800™	8.03
N08810	AL 800H™	8.03
N08811	AL 800AT™	8.03
N08825	AL 825™	8.13
S31803	AL 2205™	7.88
S21904	AL 219™ (21-6-9)	7.85
S30908	309S	
S31008	310S	7.98
S32550	AL 255™	7.81
N08700	AL700	7.95
N10665	Alloy B2	9.22
N06985	Alloy G3	8.34
N06022	Alloy 22	8.69
S24000	AL 33™	7.84
S20910	AL 50™	7.95

BACK TO WEIGHT LOSS COUPON MENU
SCROLL DOWN FOR SIXTH PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

ALLOYS AVAILABLE (Cont.)

Coupons are available in the following allows. Please call for pricing.

UNS	MATERIAL	DENSITY (g/cm³)
	AL 418 SP	7.86
	(Greek Ascoloy)	
S30300	303	7.90
	304 Nuclear	7.94
	304L Nuclear	
	304LN Nuclear	
	316 Nuclear	8.03
	316L Nuclear	
	316LN Nuclear	
	316LM	
S40500	405	7.75
S41000	410	7.65
S41008	410S	7.70
S42000	420	7.73
S44004	440C	7.74
N02200	AL 200	8.90
N04400	AL 400	8.83
	AVESTA STAINLESS, INC.	
S31803	Avesta 2205 Code Plus Two	7.80
S30415	Avesta 153MA	
S30815	Avesta 253MA	
S31254	Avesta 254SMO	8.00
	Avesta 654SMO	
S44400	ELI-T 18-2	7.70
S44635	Nu Monit	7.80
	744LN	
N08904	904L	8.00
	904LN	
N08028	928L	
S31500	3RE60	7.70
S31653	316LN (2.7 Mo)	8.00
S31726	317LMN	8.00
	34LN	
S31200	44LN (25-6-1LN)	7.70
	CARPENTER TECHNOLOGY CORPORATION	
N08020	20Cb3®	8.08
N08024	20Mo4®	8.11
N08026	20Mo6®	8.13
N20910	22 Cr-13 Ni-5 Mn	7.88
S28200	18-18 PLUS®	7.88
S45000	CUSTOM 450®	7.75
S45500	CUSTOM 455®	7.76
N07716	CUSTOM AGE 625 PLUS®	8.40
S32950	7 Mo PLUS®	7.75
N07031	PYROMET 31®	7.99
S30430	CUSTOM FLO 302 HQ	7.92
S30300	PROJECT 70® Type 303	7.83

UNS	MATERIAL	DENSITY (g/cm³)
N06600	PYROMET® 600	8.43
R30605	L605	9.20
S66286	CONSUMET® A286	7.99
	HyMu "77"	
	HyMu "80"®	8.74
	High Permability "45"	
	High Permability "49"®	8.18
	NI MARK ® 250	8.02
	Temp. Compensator "30"	8.70
	Temp. Compensator "32"	8.12
K93601	CARPENTER INVAR "36"®	8.05
K94610	KOVAR®	8.36
K94100	Glass Sealing "42"	8.12
N14052	Glass Sealing "52"	
	CREUSOT-MARREL	
S31635	164T (316Ti)	
	164 HE (316N)	
S31653	166 HE(316LN)	
	167 SPH (316L Nuclear)	
S31753	317 LN	7.90
S31726	317 LMN (4.0 MIN.)	
	473 BC (304L Nuclear)	
	AMCR	
	UR 16	
S32304	UR 35N	
S31803	UR 45N	7.80
S32550m	UR 47N (S32550 MOD-NO Cu)	7.81
S32550	UR 52N	
N08904	UR B6 (904L)	8.00
N08932	UR SB8	
N06600	UR 600	
N06625	UR 625	8.44
N08800	UR 800	
N08825	UR 825	
	A516 GR70 HIC RESISTANT	
	DELORO STELLITE	
	DELORO 40	8.20
R30001	STELLITE #1	8.69
	STELLITE #3	8.69
	STELLITE #4	8.73
R30006	STELLITE #6	8.46
R30006	STELLITE #6B (Wrought Alloy)	8.46
	TRIBALOY 400	8.99
	TRIBALOY 700	8.72
	TRIBALOY 800	8.64
	DELTA CENTRIFUGAL	
	WCA Cast Steel	

UNS	MATERIAL	DENSITY (g/cm³)
	WCB Cast Steel	
	DURIRON	
	Durco CW6M (Chlorimet 3)	9.00
J92600	Durco CF8	7.76
J92900	Durco CF8M	7.76
	Durco N-7M (Chlorimet 2)	9.22
J93370	Durco CD-4MCu	
J93900	Durcomet 5	7.85
	Durco M35	8.65
	Durichlor 51	7.06
N08007	Durimet 20 (CN-7M)	7.96
	Duriod 7101	
	Duriod 7107	
	Duriod 7201	
	Duriod 7301	
	HAYNES INTERNATIONAL	
N10001	HASTELLOY B alloy	9.24
N10665	HASTELLOY® B-2 alloy	9.20
N10675	HASTELLOY™ B-3 alloy	9.20
N10002	HASTELLOY C alloy	8.93
	HASTELLOY C4C	
N06455	HASTELLOY C-4 alloy	8.60
N06022	HASTELLOY C-22™ alloy	8.60
N10276	HASTELLOY C-276 alloy	8.80
N06007	HASTELLOY G	8.27
N06985	HASTELLOY G-3 alloy	8.27
N06030	HASTELLOY G-30® alloy	8.22
	HASTELLOY H	
N10003	HASTELLOY N alloy	8.93
N06635	HASTELLOY S alloy	8.75
N10004	HASTELLOY W alloy	9.00
N06002	HASTELLOY X alloy	8.23
N08320	HASTELLOY 20MOD	
R30605	HAYNES® 25 alloy	9.13
R30188	HAYNES 188 alloy	8.98
N07214	HAYNES 214™ alloy	8.05
N06230	HAYNES 230™ alloy	8.83
	HAYNES 242™ alloy	9.06
N07263	HAYNES 263 alloy	8.37
N53528	HAYNES 535 alloy	
R30556	HAYNES 556™ alloy	8.23
N06625	HAYNES 625 alloy	8.45
	HAYNES 716 alloy	
N07718	HAYNES 718 alloy	8.23
	HAYNES 8727 alloy	
N12160	HAYNES HR-160™ alloy	8.01
N08120	HAYNES HR-120™ alloy	8.07
N07041	HAYNES R-41 alloy	8.25

BACK TO WEIGHT LOSS COUPON MENU
SCROLL DOWN FOR SEVENTH PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

ALLOYS AVAILABLE (Cont.)

Coupons are available in the following allows. Please call for pricing.

UNS	MATERIAL	DENSITY (g/cm³)
R30155	MULTIMET alloy	8.19
R30012	ST12	
R30021	ST21	
R30031	ST31	
	STN1	
R31233	ULTIMET™ alloy	8.47
N07001	WASPALOY® alloy	8.20
	INCO ALLOYS INTERNATIONAL	
N02200	Nickel 200	8.89
N02201	Nickel 201	8.89
N02205	Nickel 205	8.89
N03301	DURANICKEL® Alloy 301	
N04400	MONEL® Alloy 400	8.80
N04405	MONEL® Alloy R-405	8.80
C71500	MONEL® Alloy 450	8.91
N05500	MONEL® Alloy K-500	8.44
	MONEL® Alloy S	
N06600	INCONEL® Alloy 600	8.47
N06601	INCONEL® Alloy 601	8.11
	INCONEL® Alloy 601GC	
N06617	INCONEL® Alloy 617	8.36
N06022	INCONEL® Alloy 622	8.61
N06625	INCONEL® Alloy 625	8.44
	INCONEL® Alloy 625LCF	
	INCONEL® Alloy 671	7.86
	INCONEL® Alloy 672	
N06686	INCONEL® Alloy 686	8.73
N06690	INCONEL® Alloy 690	8.19
N09706	INCONEL® Alloy 706	8.05
N07713	INCONEL® Alloy 713	
N07718	INCONEL® Alloy 718	8.19
	INCONEL® Alloy 718SPF	
N07725	INCONEL® Alloy 725	
N07750	INCONEL® Alloy X-750	8.28
	INCONEL® Alloy 751	
N07754	INCONEL® Alloy MA754	8.30
	INCONEL® Alloy MA758	8.14
	INCONEL® Alloy 783	
	INCOLOY® Alloy DS	7.86
N08800	INCOLOY® Alloy 800	7.94
N08811	INCOLOY® Alloy 800HT	7.94
N08802	INCOLOY® Alloy 802	
	INCOLOY® Alloy 803	
N06804	INCONEL® Alloy 804	7.92
N08825	INCOLOY® Alloy 825	8.14
	INCONEL® Alloy 838	
N19903	INCOLOY® Alloy 903	8.30
N19907	INCOLOY® Alloy 907	8.30
N19909	INCOLOY® Alloy 909	8.30

UNS	MATERIAL	DENSITY (g/cm³)
N09925	INCOLOY® Alloy 925	8.05
	INCOLOY® Alloy MA956	7.25
S66286	INCO® Alloy A-286	7.94
N10276	INCO® Alloy C-276	8.89
N06985	INCO® Alloy G-3	8.14
N06002	INCO® Alloy HX	8.23
N08926	INCO® Alloy 25-6MO	8.20
	INCO® Alloy MS 250	7.92
N08020	INCO® Alloy 020	8.05
N08330	INCO® Alloy 330	8.08
N06075	NIMONIC® Alloy 75	8.37
N07080	NIMONIC® Alloy 80A	8.19
N07090	NIMONIC® Alloy 90	8.18
	NIMONIC® Alloy 105	8.01
N07263	NIMONIC® Alloy 263	8.36
N09901	NIMONIC® Alloy 901	8.14
K93600	NILO® Alloy 36	8.11
K94100	NILO® Alloy 42	8.11
K94610	NILO® Alloy K	8.16
	NILOMAG® Alloy 77	8.77
N06004	BRIGHTRAY® Alloy B	8.30
N06003	BRIGHTRAY Alloy C	8.30
	KUBOTA	
	KCR-D183	
	KCR-171	
	KCR-271	
	KCR-283	
	LATROBE	
R30035	MP35N	8.41
R30159	MP159	8.36
S44004	440C	7.75
S42700	BG 42	7.75
S64152	Jethete M152	7.75
	403+Cb	7.69
S15500	15-5 PH	7.81
S17400	17-4 PH	7.75
S13800	PH 13-8 Mo	7.72
	MANNESMANN PIPE & STEEL CORP.	
S42000	MW Cr 13	
S31803	MW AF 22	
S32750	MW AF 25	
N08028	MW 2832	
N08825	MW 2242	
N06975	MW 2550	
N10276	MW 1560 Mo	

UNS	MATERIAL	DENSITY (g/cm³)
	NIPPON KOKAN K.K.	
	CR35A	
	NK-NI-42	
	NK-NI-52	
	NKK-CR22-65	
	NKK-CR22-125	
	NK-NIC 52-110	
	NIPPON STEEL CORP.	
	NT-13CR-75	
	NT-DX-75SS	
	NT-DX 130SS	
	REPUBLIC ENGINEERED STEELS	
	Nitronic 30	
S24100	Nitronic 32	7.78
S24000	Nitronic 33	7.75
S21900	Nitronic 40	7.83
S20910	Nitronic 50	7.88
S21800	Nitronic 60	7.62
	Tribonic 20	7.60
S13800	PH 13-8 Mo	7.76
S15500	15-5 PH	7.80
S17400	17-4 PH	7.80
	RMI TITANIUM	
R50250	Ti Gr 1	4.52
R50400	Ti Gr 2	4.52
R50550	Ti Gr 3	4.52
R50700	Ti Gr 4	
R56400	Ti Gr 5	4.44
R52400	Ti Gr 7	4.52
R56320	Ti Gr 9	4.52
R52250	Ti Gr 11	4.52
R53400	Ti Gr 12	4.43
	Ti Gr 16	4.52
	Ti Gr 18	4.52
R58640	Beta C Ti (ST)	4.82
	Beta C Ti (STA)	4.82
	ROLLED ALLOYS	
S30415	RA153MA	
S30815	RA253MA	7.80
S35315	RA353MA	
S30908	RA 309	7.89
S31008	RA 310	7.86
N08330	RA 330	7.94
N06333	RA 333	8.14
S44600	RA 446	7.47
S30615	RA85H	7.59

BACK TO WEIGHT LOSS COUPON MENU
SCROLL DOWN FOR EIGTH PAGE

RCSL

ROSE CORROSION SERVICES LIMITED

1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND

TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

ALLOYS AVAILABLE (Cont.)

Coupons are available in the following allows. Please call for pricing.

UNS	MATERIAL	DENSITY (g/cm³)
N08367	AL-6XN	8.06
N06600	RA600	8.47
N06601	RA601	8.11
S32100	RA321	
N08904	RA904L	
	SANDUSKY FOUNDRY CASTINGS	
	ALLOY 75	
	1N BRONZE	8.86
	SANDVIK STEEL CO.	
N08028	SANICRO 28	8.10
	2RE10	8.00
	2RE69	7.80
S31500	3RE60	7.70
N08904	2RK65(904L)	8.00
S31803	SAF 2205	7.80
S32304	SAF 2304	7.70
	SAF 2507	8.00
	SPECIAL METALS	
N07500	Udimet 500	
	Udimet 700	
	Udimet 720	
	STAINLESS FOUNDRY & ENGINEERING, INC.	
	ILLIUM 98	
	ILLIUM 98HF	
	ILLIUM B	
	ILLIUM G	
	ILLIUM P	
	ILLIUM PD	
	SUMITOMO CORPORATION	
	SM 22 CR-65	
	SM 22 CR-125	
	SM 25 CR-75	
	SM 25 CR-110	
	SM 25 CR-140	
	SM-IN 825-125	
	SM-IN 825-110	
	SM 2035-110	
	SM 2535-110	
	SM 2550-110	
	TELEDYNE ALLVAC	
N06110	ALLCORR	8.33
	ALLVAC ASTROLOY	7.91
N07041	ALLVAC RENE 41	8.24

UNS	MATERIAL	DENSITY (g/cm³)
N07001	ALLVAC WASPALOY	8.19
R54520	ALLVAC 5-2-5	4.45
R56400	ALLVAC 6-4	4.43
R56402	ALLVAC 6-4 ELI	4.48
R56620	ALLVAC 6-6-2	4.54
R54810	ALLVAC 8-1-1	4.31
	ALLVAC 520	8.22
N07718	ALLVAC 718	8.19
	ALLVAC 720	8.08
	ALLVAC 1410	7.84
S66286	NICKELVAC A-286	7.92
N10276	NICKELVAC C-276	8.89
	NICKELVAC F-75	8.30
N10665	NICKELVAC HB-2	9.22
N06002	NICKELVAC H-X	8.22
N05500	NICKELVAC K-500	8.47
K92890	NICKELVAC M-250	8.00
K93120	NICKELVAC M-300	8.00
S31600	NICKELVAC R-26	8.19
N07722	NICKELVAC W-722	8.24
N07750	NICKELVAC X-750	8.30
N08020	NICKELVAC 23	8.06
N04400	NICKELVAC 400	8.83
N06600	NICKELVAC 600	8.41
N06625	NICKELVAC 625	8.44
N08825	NICKELVAC 825	8.14
N09901	NICKELVAC 901	8.22
	TELEDYNE VASCO	
	Vasco Max T-200	
	Vasco Max T-250	
	Vasco Max T-300	
	Vasco Max C-250	
	Vasco Max C-300	
	Vasco Max C-350	
	Vasco 734	
	Vasco 13-8 AHS	
	Vasco 455 AHS	
	TELEDYNE WAH CHANG	
R60702	Zircadyne 702	6.51
R60705	Zircadyne 705	6.64
R60001	Zirconium R/Gr	6.51
R60802	Zircaloy-2	6.56
R60804	Zircaloy-4	6.56
R60901	Zr2.5Cb (NNb)	6.64
	TRENT TUBE DIV. OF CRUCIBLE MATERIALS	
K93601	INVAR 36	8.05

UNS	MATERIAL	DENSITY (g/cm³)
N08020	20Cb3	8.08
N08367	AL6XN	8.06
S17700	17-7 PH	7.81
S30453	304LN	7.94
S31725	317LM	7.91
S31803	Trent 2205	7.83
S43000	430	7.70
S43035	Trent Type 439L	7.75
S44660	SEA-CURE	7.74
	VDM TECHNOLOGIES CORPORATION	
	1815LCSI	
N08995	Cronifer 1925hMo	8.10
	2521LC	
	2522LCN	
N08031	Nicrofer 3127hMo	8.10
N08020	Nicrofer 3620Nb	8.05
	4221hMO	
N06985	Nicrofer 4823hMo	8.30
N10276	Nicrofer 5716hMoW	8.89
N06059	Nicrofer 5923hMo	8.80
R20033	Nicrofer 3033	
N06025	Nicrofer 6025HT	
N06045	Nicrofer 45TM	
N10629	Nimofer 6629	
	WAUKESHA FOUNDRY INC.	
	3 WM	
	23 BIWM	
	54C	
	88 WM	
	119 WM	
	EM-27	
	HC250	

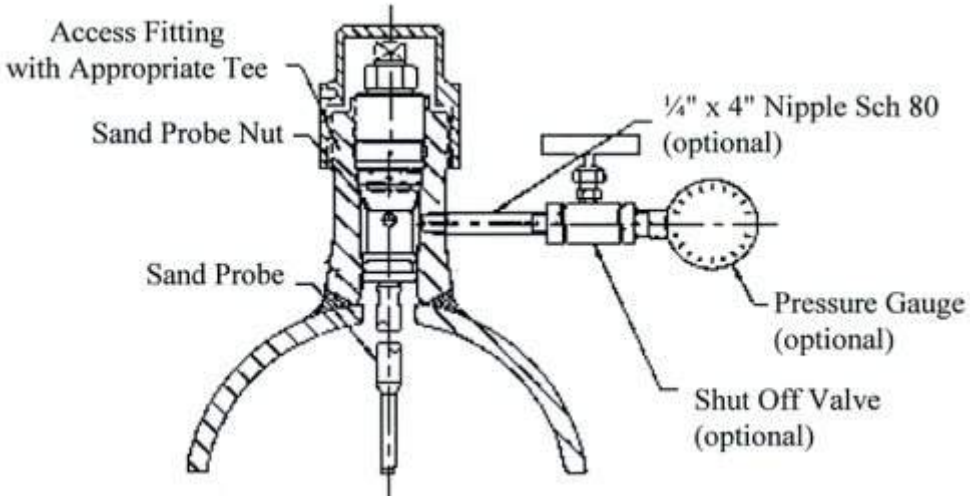
If you are interested in alloys not listed here, please contact our sales department for information on how we can meet your specific material needs.

TELEPHONE:
01635 552225
Facsimile Transmission:
01635 550681

BACK TO WEIGHT LOSS COUPON MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model SP7000 - Sand Probe for High Pressure Access Systems



Model SP7000 Sand Probes are used to detect erosion in flowlines caused by abrasive particles such as sand. One end of the probe is attached to a tee-type, high pressure access fitting with a solid plug by means of a sand probe nut. The other end is sealed, thin walled tube placed with the process stream to be exposed to particulate flowing through the system. (To minimise the effects of corrosion and thus more accurately detect erosion with the stream, the exposed element is made of stainless steel). As particulate impinges on the surface of the sensing element, a hole is eventually eroded through the element. Once penetration has occurred, the system pressure then travels up the tube, into the access fitting body, and through a nipple and valve to a pressure gauge assembly. The pressure gauge detects that the element has been breached. If required, electronic pressure sensors can be connected to alarm systems to signal the exact moment when failure occurs.

Specifications:	
Probe Body	Stainless Steel
Temperature Rating	500° F/260° C
Pressure Rating	3600psi/245 Bar
Mounting	High Pressure Access System with Solid Plug

Sand Probe Parts	
Part No.	Description
HA700018	Nipple, 0.25 inches x 4 inches Sch 80
HA 700322	Valve. 0.25 inches
HA700221	Sand Probe Nut
HA700603	Pressure Gauge
HA700121	Solid Plug

BACK TO MISCELLANEOUS MENU
SCROLL DOWN FOR SECOND PAGE

RCSL

ROSE CORROSION SERVICES LIMITED

1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

SP7000 ORDERING INFORMATION

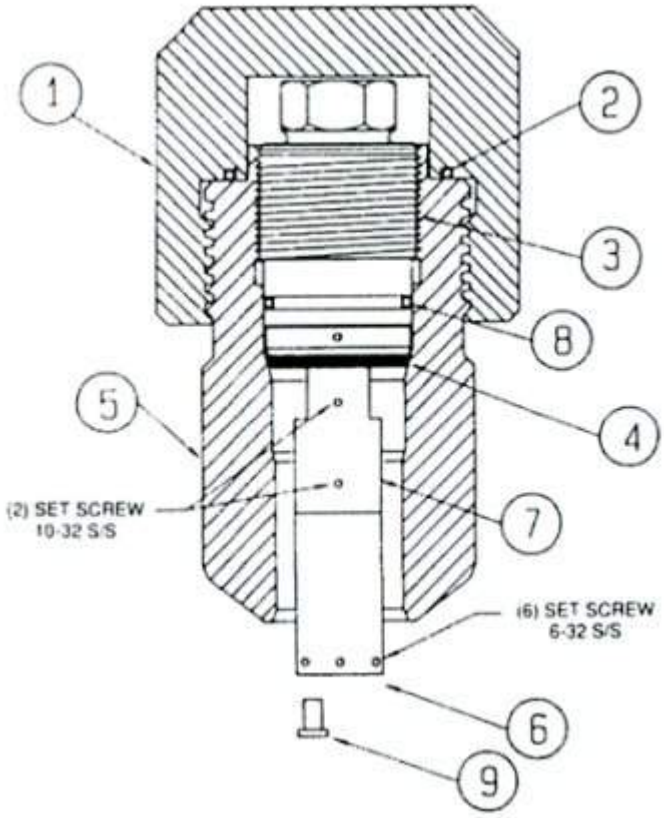
Model					
SP	Sand Probe for High Pressure Access Systems				
	Mounting Material				
	2	316			
	3	S31803			
	4	C276			
		Tube Material			
		2	316		
		3	S31803		
		4	C276		
			Tube Wall Thickness		
			1	0.016 inches	
			2	0.028 inches	
			3	0.035 inches	
				Length	
				XXXX	Length in inches, stated in 2 decimal places format (Ex:6.25inches = 0625)
SP	2	2	1	0625	Example of Probe Ordering#

For alloys, sizes, or other special requirements not listed, contact our sales department.

BACK TO MISCELLANEOUS MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model HC6200 Bio-probe



Model HC6200 bio-probe is used to collect samples of bacteria in gas and oil producing systems. The bacterial population on a system's metal surfaces more relevant to corrosion than the bacteria population in the system's fluids. This is because only surface or sessile bacteria cause corrosion. Thus a corrosion control program is ineffective unless it kills those bacteria which have formed attached biomasses. The same bacteria which cause problems in gas pipelines, tanks, vessels, oil wells and water handling systems attach to the bio-probes sample element. Since the bio-probe is designed for high pressure access systems, common throughout the oil field, it becomes a convenient and economical way for sampling corrosion-causing biological activity.

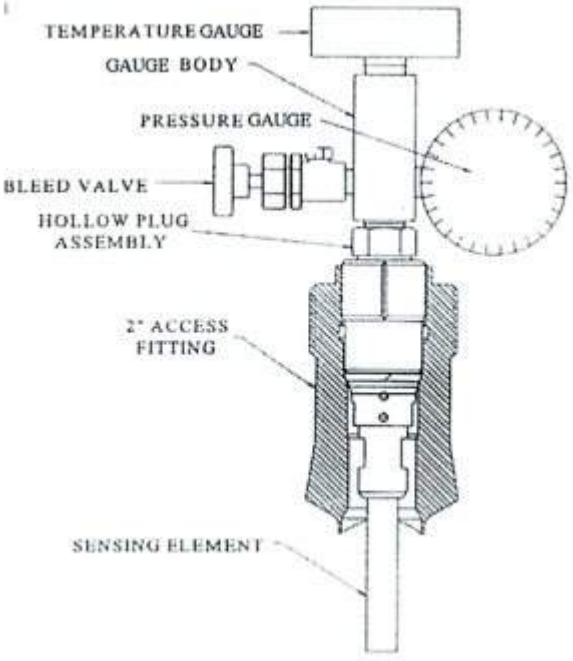
Part No	Description
HC62158XXXX	Bio-probe Assembly with Delrin holder (XXXX = insertion length in inches, stated in 2 decimal place format)
EL438	Biological Sample Elements, C.S.
HA 700120	Solid plug, High Pressure Access System, 316

Item No.	Description	Material
1	Heavy Duty Cover	Carbon Steel
2	0-ring	Viton AE
3	Solid Plug	316
4	Primary Packing (primary seal)	25%G.F.Teflon AE
5	Access fitting	Carbon Steel
6	Bacteria sample holder	Delrin
7	Bacteria fixture	316
8	0-ring	VitonAE
9	Sample element "Bullet"	Mild Steel or brass

BACK TO MISCELLANEOUS MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model HY7000 - Hydrogen Probe with Gauge Assembly for High Pressure Access Systems



Model HY7000 is a high pressure hydrogen probe which can be used for pressures up to 3600psi. Hydrogen probes are commonly used for monitoring hydrogen permeation in steels, which could lead to embrittlement, blistering and decarburisation resulting in the failure of the material. The probe assembly consists of three subassemblies: the gauge assembly, the hollow plug assembly and the sensing element assembly. The gauge assembly consists of a gauge body, a pressure gauge (0-40psi), a temperature gauge and a bleed valve. The sensing element is about 3.5 inches long and consists of a thin-walled tube which is sealed from the process and allows nascent hydrogen to permeate. The probe can be supplied with or without the gauge assembly, which can be bought separately if required. The minimum length of the probe is 5.50 inches and can be ordered in 0.25 inch increments.

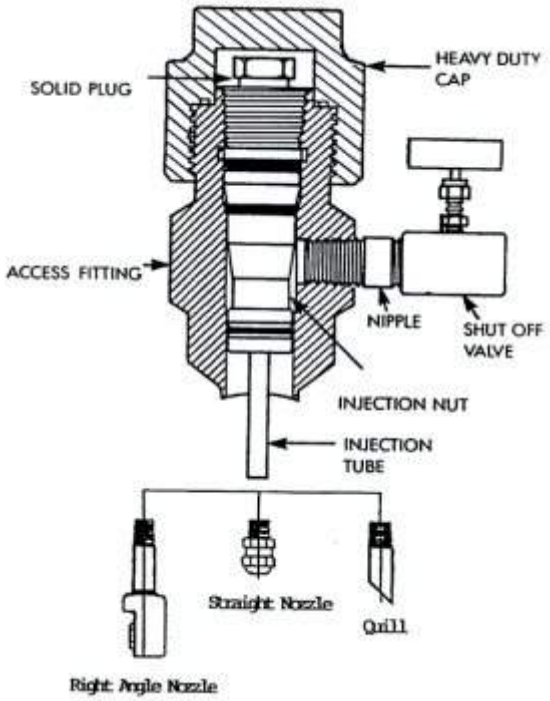
Specifications:	
Probe Body	316 Stainless Steel
Temperature Rating	500° F/260° C
Pressure Rating	3600psi/245 Bar
Mounting	High Pressure Access System with Hollow Plug

Gauge Assembly Parts	
Part No.	Description
PS5509	Gauge Assembly (complete)
PR6441158	Pressure Gauge
PR6032	Temperature Gauge
PR6034	Bleed Valve
PR6158158	Gauge Body

BACK TO MISCELLANEOUS MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Two-Inch System
Injection and Sampling System



Injection and Sampling Systems are fundamental to Corrosion Control programs. They are applicable to a large variety of processes in the petroleum, chemical and water treatment industries. Injection systems may be used for the injection into the system of a wide range of chemicals such as biocides, demulsifiers, corrosion inhibitors, oxygen scavenger, glycol and mono-ethylene glycol, dewaxers, methanol, odorisers and a wide range of product activities.

Sampling systems, as the name implies are used to take samples of the process fluid medium. Such samples are the analyzed in the laboratory for inhibitor concentration levels, the presence of metal ions, oxygen levels, scale forming compounds and a wide range of process parameters.

INJECTION SYSTEMS

The art of chemical injection is a complex technology. Irrespective of the type of injection or injected fluid, several factors relative to the process system and the injection system must be considered.
Principle factors are:

Pressure Differential

This is the difference between the injection pump pressure and the process line or vessel pressure. Ideally the pressure differential should be 8 Bar (100psi).

BACK TO CHEMICAL INJECTION MENU
SCROLL DOWN FOR SECOND PAGE

Temperature
Temperature directly affects viscosity. Ideally the temperature of both the injected chemical and the line product should be about 21oC (70o).

Viscosity
This is the measure of fluids resistance to flow. The more viscous the fluid the smaller the spray angle.

Spray Angle
Spray angle is affected by viscosity, spray distance and pressure differential.

Spray Coverage
This is calculated theoretical area coverage.

Specific Gravity
The specific gravity of a liquid is the density ratio of the liquid to water. The flow rate of a liquid is affected by its specific gravity.

Injection Rate
This is the amount of chemical to be injected within a specified period and is defined as Litres Per Day (LPD) Gallons Per Hour (GPH) etc.

Injection systems are available for injection rates varying from 0.38 litres/hour (0.1 GPH) to 250 litres/hour (65.7GPH).

Injection may be via a simple open ended tube or a quill that relies upon a natural turbulence within the pipeline to disperse the injected chemical and to accomplish even distribution. There is no restricting orifice and such systems tend to be clog proof even when using unscreened chemicals a disadvantage of such systems is that at low flow rates there tends to be a concentration of the injected chemical at the pipe wall surface below the injection point.

INJECTION POINT
The maximum fluid velocity is usually at the centre of the line hence the most effective position for injection is generally at the centre of the pipe in the direction of the product flow. If the line is to be pigged, the injection point may be flush with the pipe wall. This eliminates the need to remove the injection probe before pigging operations begin. On pipelines this means that injection is perpendicular to the product flow. Top of the line may be used if the injection is required to be oblique or horizontal to the product flow.

A more comprehensive discussion of the factors to be considered in the design of chemical injection systems is contained in the Rose Corrosion Injection Primer.

A typical Two Inch System Injection Assembly is shown above. A sampling system uses the same components. The various components of the assembly are:

1. An Access Fitting Body with a side Tee through which the fluid transfer takes place. The Tee may be threaded or welded. Welded Tees are either flanged or

buttweld nipple. Threaded Tees are based on an NPT tapped hole in the fitting body. The Tee size is rated according to the injection rate and injection and viscosity of the injection chemical.

2. A Solid plug Assembly inside the fitting body is used to carry an injection nut which has the injection tube/nozzle assembly screwed to its base.

3. An Injection/Sampling Nut. This is a multiple use nut that replaces the nut of the Solid Plug. It is used to direct the injected product to the injection tube or atomisation device. An Injection Nut sizing chart is shown in Table 1.

4. The Injection or Sampling Tube or Nozzle. The various forms offered are:

a. X Open. This is an open tube. The natural turbulence within the pipeline is used to ensure even distribution. The pressure differential is experienced at the orifices so it is necessary to control the injection rate at the injection pump or the shut off valve.

b. X Quill. This has a scarf and quill inserted at the open end. It utilizes the turbulence created by its unique design to achieve distribution of the injected chemical into the product flow. Injection Tube x Quill are clog proof and give extremely good dispersion of the inhibitor provided that the product flow is 4.6 metres per second or greater. As with the Open Tube, injection rate must be controlled at the Injection Pump or Shut Off Valve.

c. X NPT. Again similar to the Open Tube but is threaded at the dispersion end, thus allowing attachment of female nozzle assemblies. Injection may be perpendicular with the use of a straight nozzle or parallel with a right angle nozzle.

d. X Head. This is the usual style used for parallel injection at the centre of the line. The head is integral with the Injection Tube and is designed to accept the Cap and Core from a standard nozzle assembly.

5. Nipples. Nipples are used with threaded Tee Access Fitting Bodies and are the means of connecting the shut off valve to the Access Fitting Body.

6. Shut Off Valves. These are required to cut-off the injection flow and maintain pressure integrity through the Tee when the solid plug assembly is being removed or replaced. They are also used to control the injection flow rate. A nipple and Shut Off Valve sizing chart is given in table 3.

7. Check Valve. These are optional items which may be fitted within the Injection Tube in the intlet line to the Access Fitting Body Tee.

8. Atomisation Nozzles and Cap and Cores. These are the various devices which, attached to the dispersion end of the Injection Tube, permit atomization of the fluid as it is injected into the product line or vessel.

Nozzle assemblies are complete units which contain caps, cores, and strainers. They are available with both female and male NPT threads to match the thread on the Injection Tube X NPT. Caps, cores and strainers are component parts of the Nozzle Assemblies. They have male UNF threads which engage with the UNF threads in the dispersion body of the Injection Tube X Head.

The correct Nozzle size may be determined from Table 4.

9. The Injection or Feed Pump. The injection pump must be capable of generating sufficient injection line pressure to overcome the line operating pressure and thus create the required pressure differential across the atomizing nozzle or injection tube.

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Materials of Construction.
All components are manufactured from 316 Stainless Steel as standard with the exception of seals and packing. These materials comply with the requirements of NACE Standard MR 01-75. Recommended materials for sulphide stress cracking environments.

INJECTION TUBE SIZING
Flush - Non Flange Access Fitting
X Open: (FH + PW)-(2.04 + N) = L
X NPT: (FH + PW)-(3.353 + N) = L

Flush - Flange Access Fitting
X Open: (FH + PW + MF)-(2.04 + N) = L

Top of Line - Non Flange Fitting
X Open (FH + PW + IL)-(2.04 + N) = L
X NPT: (FH + PW + IL)-(2.04 + N) = L
X Quill: (FH + PW + IL)-(2.04 + N) = L

Top of Line - Flange Fitting
X Open (FH + PW + IL + MF)-(2.04 + N) = L
X NPT: (FH + PW + IL + MF)-(3.363 + N) = L
X Quill: (FH + PW + IL + MF)-(2.04 + N) = L

Centre of Line - Non Flange Fitting
X Quill: (FH + PD/2)-(2.04 + N) = L
X Head: (FH + PD/2)-(2.04 + N) = L

Centre of Line - Flange Fitting
X Quill: (FH + PD/2 + MF)-(2.04 + N) = L

Bottom of Line - Non Flange Fitting
X Open: (FH + PD)-(2.04 + N + PW)=L

Bottom of Line - Flange Fitting
X Open: (FH + PD + MF)-(2.04 + N + PW) = L

FH = Access Fitting Height
PW = Pipe Wall Thickness
N = Injection Nut Length
L = Injection Tube Length
MF = Mating Flange Height
IL = Insertion Length into Pipe or Vessel
PD = Pipe Outside Diameter

BACK TO CHEMICAL INJECTION MENU
SCROLL DOWN FOR FIFTH PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

HOW TO ORDER

A) The Access Fitting Body style and Tee size may be determined from the Access Fitting product literature.
B) The Injection Nut size may be determined from Table 1.

Nut Thread Size	Nut Length				
	1.75"	3.00"	3.50"	3.75"	5.50"
	Part Number	Part Number	Part Number	Part Number	Part Number
1/8" (3.2mm)	700219	700220	700227	700231	700235
¼" (6.4mm)	700221	700222	700228	700232	700236
½" (12.7mm)	700223	700224	700229	700233	700237
¾" (19.0mm)	700225	700226	700230	700234	700238
TABLE 1					

Use 1.75 inch Nut Length for Access Fitting Body Height 5.25 inch, use 3.00 inch or 3.50 inch Nut length for 6.25 inch Access Fitting Body Height, use 3.75 inch for 7.25 inch Access Fitting Body Height and use 5.50 inch for 8.25 inch Access Fitting Body Height.

C) Determine the Injection Tube type required. Determine the injection point. Calculate the Injection Tube length using the sizing formulas. Use this information to determine the Injection Tube Part Number from Table 2.

Model	Injection Tube Type	Material	NPT Thread Sizes	Injection Tube Length
IQ - xx - xx - xx - xx.xx. = Part. No.				
required				
	1 - X Open	01 – 316 S.S	01 - 1/8"	Open/Quill/NPT Available from 3.2 cm to 76.2cm X Head Available from 5.7cm to 76.2cm
	2 - X Quill	02 - Other (Specify)	02 - ¼"	
	3 - X NPT		03 - ½"	
	4 - X HEAD		04 - ¾"	
TABLE 2				

D) A Nipple and Shut Off Valve to match the Tee of the Access Fitting Body may be selected from Table 3

Access Fitting Tee Size	Valve 316 S.S.	Nipple 100mm 316 S.S. Sch 80
	Part Number	Part Number
¼"	700322	700018
½"	700323	700019
¾"	700324	700020
1"	700325	700021
TABLE 3		

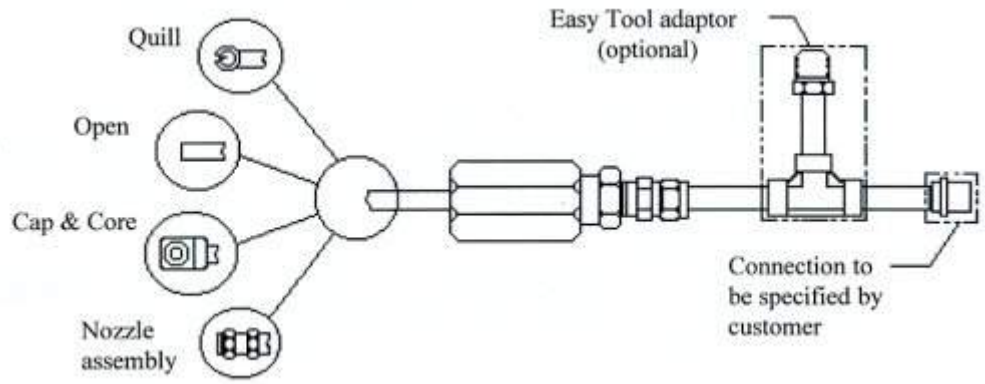
E) If applicable select a suitable Nozzle Assembly/Cap and Core from Table 4

Part Number	Orifice Diameter/Nozzle Type	GPH Capacity & Pressure Differential			
		40 PSI	60 PSI	80 PSI	100 PSI
700030	0.30 - ¼" NPT Fem.N	0.3	0.36	0.42	0.48
700031	0.40 - ¼" NPT Fem.N	0.4	0.48	0.56	0.64
700032	0.60 - ¼" NPT Fem.N	0.6	0.72	0.84	0.96
700034	0.30 - ¼" NPT Flush	0.3	0.36	0.42	0.48
700035	0.40 - ¼" NPT Flush	0.4	0.48	0.56	0.64
700036	0.60 - ¼" NPT Flush	0.6	0.72	0.84	0.96
700038	0.30 - Cap/Core 9/16"	0.3	0.36	0.42	0.48
700039	0.40 - Cap/Core 9/16"	0.4	0.48	0.56	0.64
700040	0.60 - Cap/Core 9/16"	0.6	0.72	0.84	0.96
TABLE 4					

BACK TO CHEMICAL INJECTION MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Model IP4000 - Injection and Sampling System
Retractable with Packing Gland



Model IP4000 Injection and Sampling System is a retractable unit commonly used in field and plant applications. A Specially designed packing gland is used with the unit for insertion into or retraction from a pressurised system without a process shutdown. The unit is designed to mount onto a 1 inch piping system, but can easily be adapted to fit your specific requirements. The unit assembly consists of a packing gland and an insertion rod with an injection/ sampling fitting. The fitting, which is threaded or welded to the end of the rod, can be either a quill, open, cap and core or nozzle assembly type. A safety cable is also provided to prevent blowout. In systems with pressure over 150psi, an adaptor for the Easy Tool may be added to the unit. Standard packing material in the packing gland is Teflon however, graphoil packing can be provided for high temperature applications. Model IP4000 units are available in different lengths and materials.

Specifications:

Body:	316 Stainless Steel
Temperature Rating:	500°F / 260°C – Teflon
	1200°F / 649°C – Graphoil
Pressure Rating:	1500 PSI / 102 Bar
Mounting:	1” Full Port Valve (Min.)

STD. LENGTH	I.L. (Max)
18”	12.1”
24”	18.1”
30”	24.1”
36”	30.1”
42”	36.1”

BACK TO CHEMICAL INJECTION MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

CHEMICAL INJECTION SKID UNITS

Rose Corrosion Services Limited design and manufacture packaged, skid mounted chemical injection units to meet customer specifications. Pumps are selected on the basis of capacity and service. Storage tanks are designed in accordance with BS 5500 and fabricated from 316 St.St. or Carbon Steel. Supply includes fittings and accessories including:

- Interconnecting piping, valving and fittings.
- Common support frame built in Carbon Steel.
- Lifting Lugs.
- Painting of Carbon Steel Metallic Parts.
- All necessary cable and glands.
- Frame earthing lugs.

Fields of Application

Oil and Gas Industries

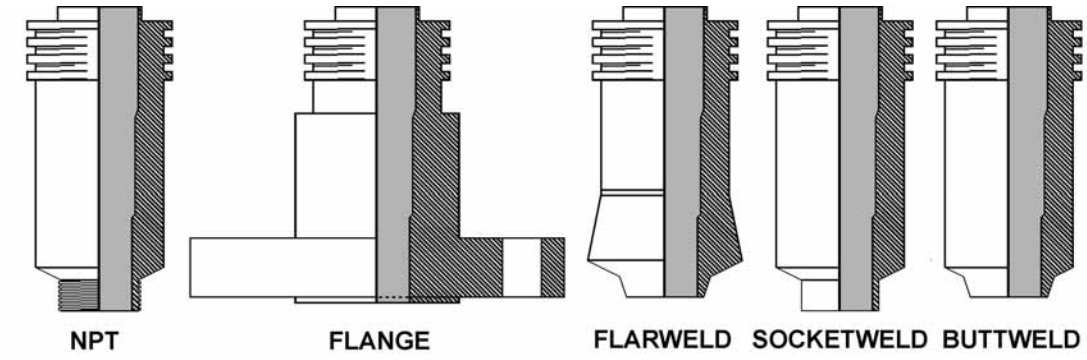
- Corrosion Inhibitor Injection.
- Sodium Hyperchlorite Dosing.
- Bactericide Injection

BACK TO CHEMICAL INJECTION MENU

ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Two-Inch System Access Fitting Assemblies

TRISEAL*



The TRISEAL* Two Inch System makes it possible to insert and retrieve a complete range of corrosion monitoring, erosion monitoring, biomonitoring, hydrogen monitoring, chemical injection and sampling system probes, quills and nozzles whilst the operating system, vessel or pipeline remains operational and at full operational pressure. A comprehensive range of access fitting assemblies are available in a wide range of styles and materials.

Two Inch System Access Fitting Assemblies consist of:

1. The Access Fitting Body.
2. A Solid or Hollow Plug, and
3. A Thread Protector, (Optional)

The Design of the Access Fitting Bodies:

Standard and Codes:

- ASME B31.3
- API RP 14E
- ASME/ANSI B16.5
- NACE MR-01-75

All components of the TRISEAL* System Two Inch System are interchangeable with existing 2 inch high pressure access systems

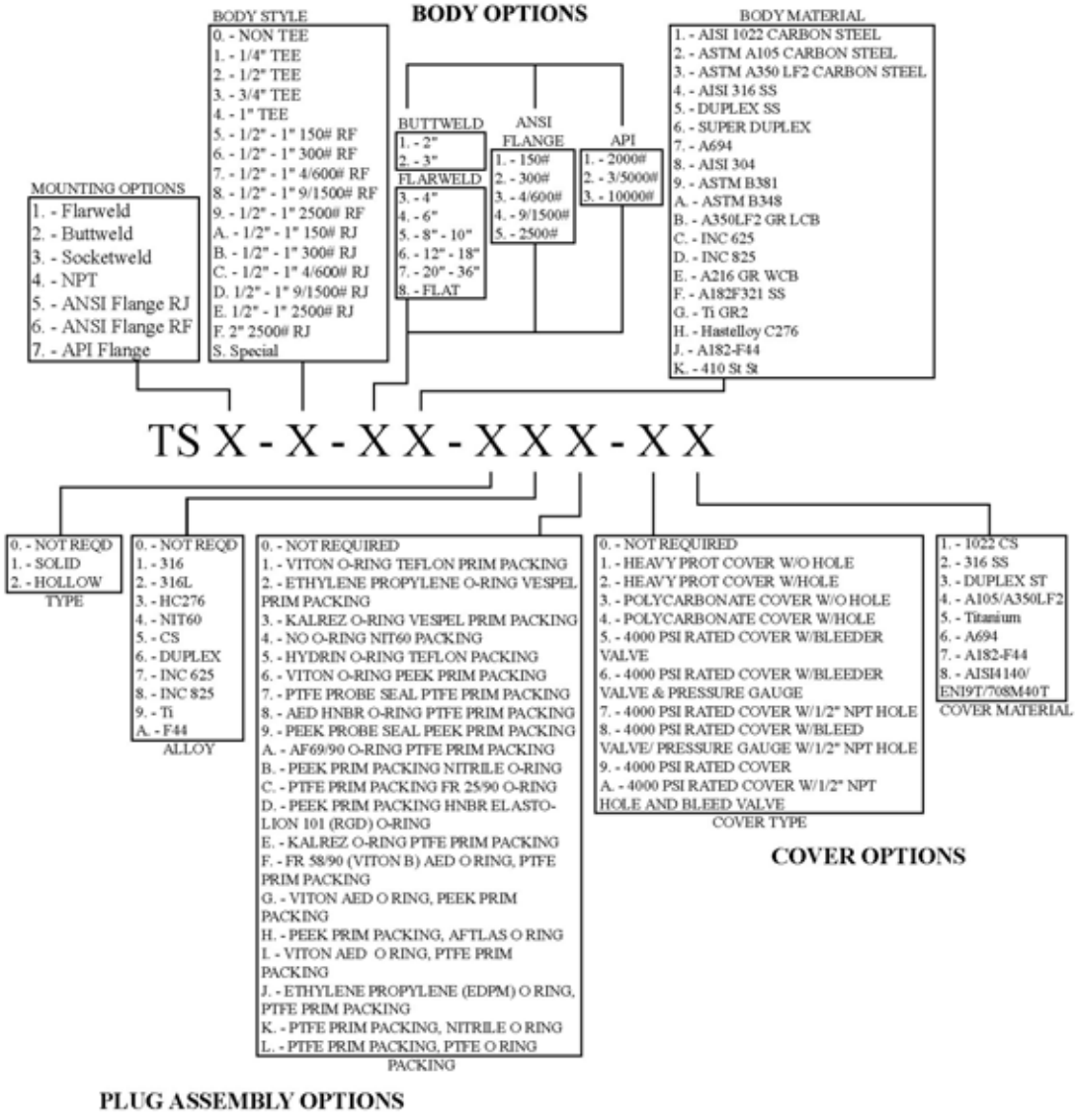
*TRISEAL is a Registered Trade Mark of Rose Corrosion Services Limited

BACK TO ACCESS FITTINGS MENU

SCROLL DOWN FOR SECOND PAGE

ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Two-Inch High Pressure Access Fittings
Ordering Information Chart



1. To order an Access Fitting Body only, use the first eight characters on the chart. Example: If a 0.25 inch Tee 4/600# ANSI Flange RJ fitting made of Duplex SS is required, use part TS51350000.

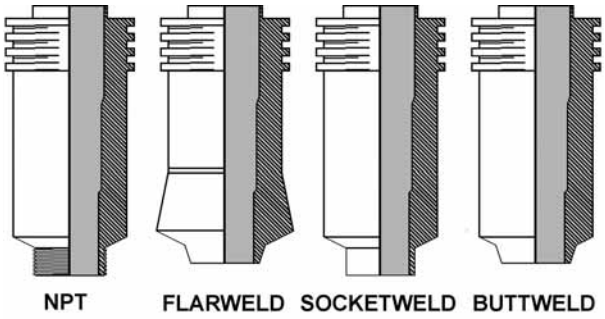
2. To order a Body with a Plug Assembly, use the first eight characters on the chart. Example: If a Flarweld mount with a 0.75 Tee body style and pipeline size of 4 inch, made with a body material of ASTM A105 Carbon Steel is needed, with a Solid CS Plug, a Hydrin O-Ring Teflon packing, use part #TS13321550.

3. To order a body with a Plug Assembly and a Cover, use all nine characters on the chart. Example: #TS133215511

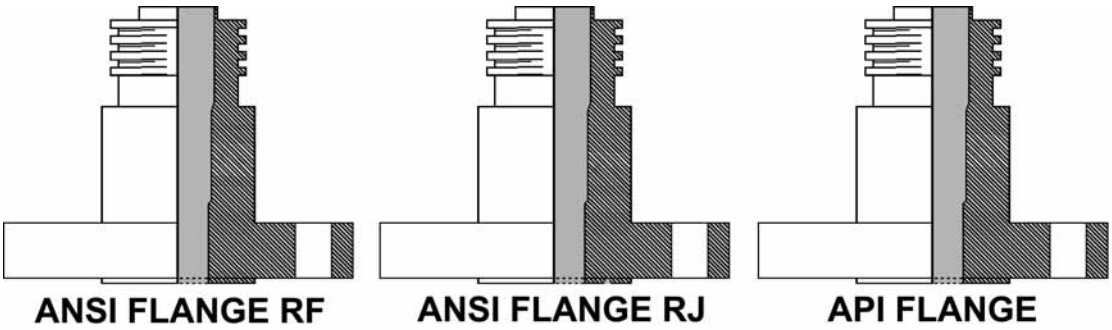
BACK TO ACCESS FITTINGS MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Non Tee Type Access Fittings



Model	Height (in)	Weight (lbs)
Flarweld	5.25	5.5
Buttweld	5.25	5.5
Socketweld	6.25	4.5
NPT	6.25	4.5



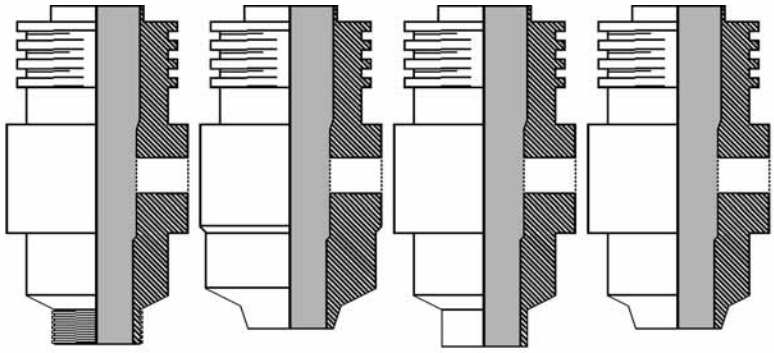
Flange Size	Height (in)	Weight (lbs)
150	5.25	10.5
300	5.25	11.5
4/600	6.25	15.25
9/1500	6.25	30.75
2.500	6.25	40

Temperature Rating --- -20°F (28.9°C) to +350°F 176.6°C
Pressure Rating --- 6000PSI or as Flange Size

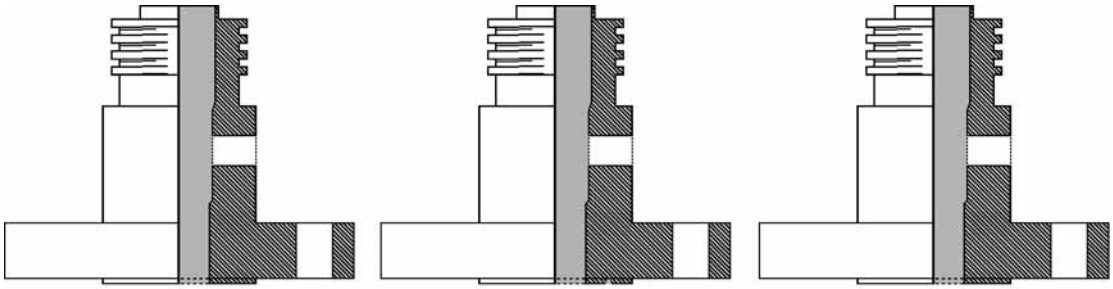
BACK TO ACCESS FITTINGS MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Tee Type Access Fittings



0.25 inch T		0.5 inch T		0.75 inch T		1 inch T	
Height (ins)	Weight (lbs)	Height (ins)	Weight (lbs)	Height (ins)	Weight (lbs)	Height (ins)	Weight (lbs)
5.25	4.5	6.25	5.75	6.25	6.5	7.25	7

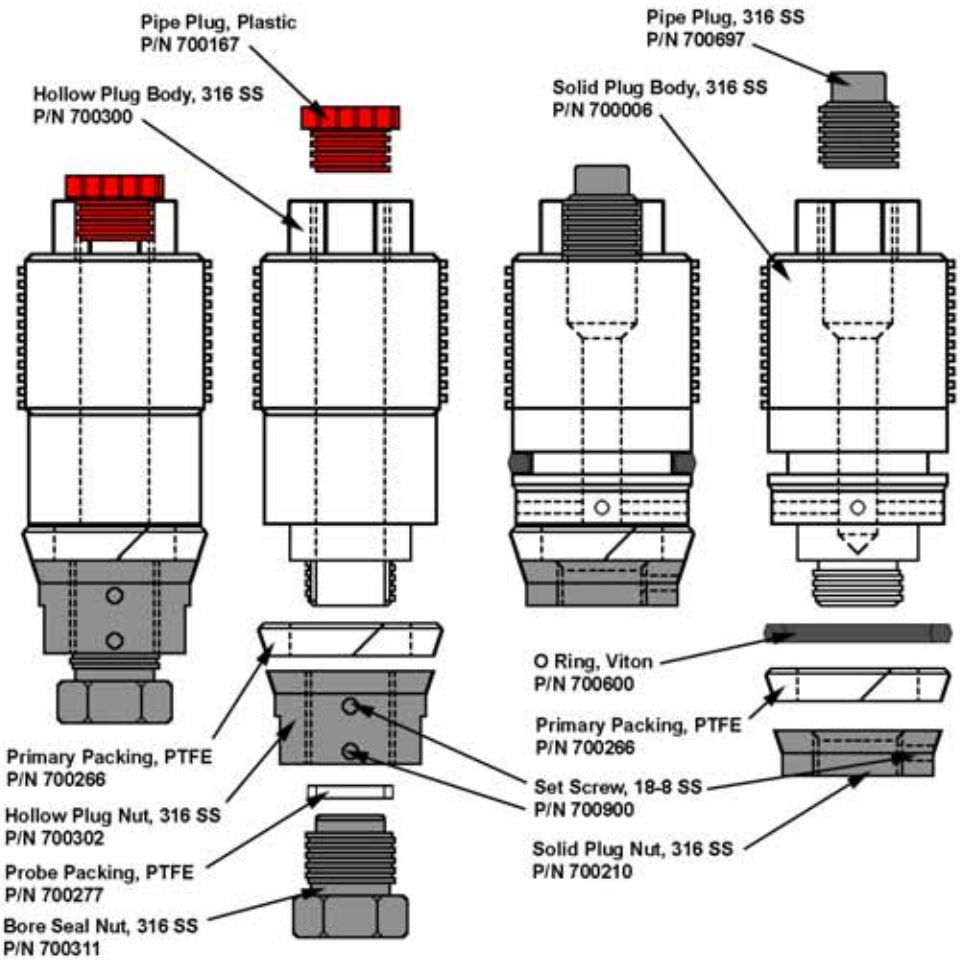


		0.25 inch T		0.5 inch T		0.75 inch T		1 inch T	
Model	Flange Size	Height (ins)	Weight (lbs)	Height (ins)	Weight (lbs)	Height (ins)	Weight (lbs)	Height (ins)	Weight (lbs)
ANSI Flange RF	150	5.25	9.75	7.25	10.00	7.25	10.00	7.25	10.50
	300	5.25	11.50	7.25	11.75	7.25	12.00	7.25	12.00
	4/600	6.25	12.75	7.25	13.00	7.25	13.00	7.25	13.00
	9/1500	6.25	25.75	8.25	26.00	8.25	26.25	8.25	26.50
	2500	6.25	40.20	8.25	40.50	8.25	40.40	8.25	40.75
ANSI Flange RJ	150	5.25	9.75	7.25	9.75	7.25	13.00	7.25	13.00
	300	5.25	11.50	7.25	10.00	7.25	17.00	7.25	17.00
	4/600	6.25	12.75	7.25	11.75	7.25	18.00	7.25	18.00
	9/1500	6.25	25.75	8.25	25.75	8.25	38.00	8.25	38.00
	2500	6.25	40.10	8.25	40.10	8.25	45.50	8.25	45.50
API Flange	2000#	6.25	15.75	7.25	18.00	7.25	18.00	7.25	18.00
	3/5000#	6.25	31.00	8.25	38.00	8.25	38.00	8.25	38.00
	10000#	6.25	40.50	8.25	45.50	8.25	45.50	8.25	45.50

BACK TO ACCESS FITTINGS MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Two-Inch System Accessories



Hollow Plug Assembly, 316 SS
P/N 700952

Solid Plug Assembly, 316 SS
P/N 700120

ACCESSORIES CONTINUE ON THE NEXT PAGE

BACK TO ACCESS FITTINGS MENU

SCROLL DOWN FOR SECOND PAGE

RCSL

ROSE CORROSION SERVICES LIMITED

1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND

TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

PROTECTIVE COVERS

Application	Description	Part No.	Material
Continuous Monitoring with pressure retaining seal and 0.5 inch NPT hole for permanent probe adaptor	Cover with 0.5 inch NPT Hole	700731	1022 C.S.
Continuous Monitoring	Cover with Hole	700732	1022 C.S.
Intermittent Monitoring - Chemical Injection	Cover without Hole	700734	1022 C.S.
Continuous Monitoring	Cover with Hole	700435	Polycarbonate
Intermittent Monitoring	Cover without Hole	700436	Polycarbonate
Provides a secondary seal in case of leaks	Cover and Bleed Valve	700480	1022 C.S.
Similar to P.N 700480	Cover, Bleed Valve and Pressure Gauge	700481	CS/316 SS
Provides a secondary seal whilst permitting continuous monitoring - not for use above 4000 PSI	Cover, Bleed Valve Pressure Gauge and 0.5 inch NPT Hole	700482	CS/316 SS

SERVICE EQUIPMENT

Application	Description	Part No.	Material
Maintenance of threads in the Access Fitting Body	Thread Tap Assembly	700111	M2 Steel
Maintenance of threads on the Solid and Hollow Plug Bodies	Thread Die Assembly	700112	M2 Steel
Removal of rust, scale etc. from the plug seat in the Access Fitting Body	Seat Reamer	700113	.
For the removal of debris from the Access Fitting Body threads	Thread brush	700114	.
Maintenance of the 3 inch Acme Thread on the Access Fitting Body	3 inch Acme Thread Cleaner	700115	.
Multi Purpose Grease	Lithium Grease	700116	.
For use in light hydrocarbon liquids	Silicone Grease	700117	.
For cleaning sand and debris from the Access Fitting Body Threads before installation of Solid and Hollow Plugs under pressure	Cleaning Tube Assembly	700118	.

BACK TO ACCESS FITTINGS MENU

RCSL

ROSE CORROSION SERVICES LIMITED

1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Seal and "O" Rings

Temperature Range	Material	Part Number
+45° C to +176° +C -50° F to +350°+F	"O" Ring, Viton	700600
	Primary Packing, Teflon	700266
Steam to +450°F +250°C	"O" Ring, Ethylene Propylene	700139
	Primary Packing, Vespel	700773
+350° +F to +500°+F +176° +C to +260 +C	"O" Ring, Kalrez or Chemraz	700680
	Silicone	700601
	Primary Packing, Vespel	700733
In Excess of 500°F 287°C	Primary Packing, Nitronic 60 Do not use "O" rings at these temperatures.	700284

BACK TO ACCESS FITTINGS MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Two-Inch System
Retriever and Service Valve Kits

The Retriever and Service Valve permit safe and simple removal of a range of monitoring probes and chemical injection devices whilst the pipeline or vessel is under operating pressure. The retrieval tool has been designed to operate on the principal of balancing the pressure acting on the internal surfaces of the tool so that no resultant force is applied to the retriever moving parts whilst the equipment is being operated. Retriever tools are sized to accommodate different pipeline pressures and probe/device lengths. All the materials of construction comply with the requirements of NACE standard MR-01-75 (92).

Service Valves are lightweight, portable 2 inch ball valve type which, interface the retriever to the Two Inch System Access Fitting. The valve also contains the line pressure whilst the Retriever and Access Fitting Plug Assembly are removed from the system. Service Valves are supplied with two bleed valves. One valve bleeds to atmosphere, allowing pressure within the retriever/valve system to be released. The second valve bleeds pressure from the outlet (line) to the inlet (retriever) side of the valve. This makes operation of the valve quite easy, as the valve seats are not under load.

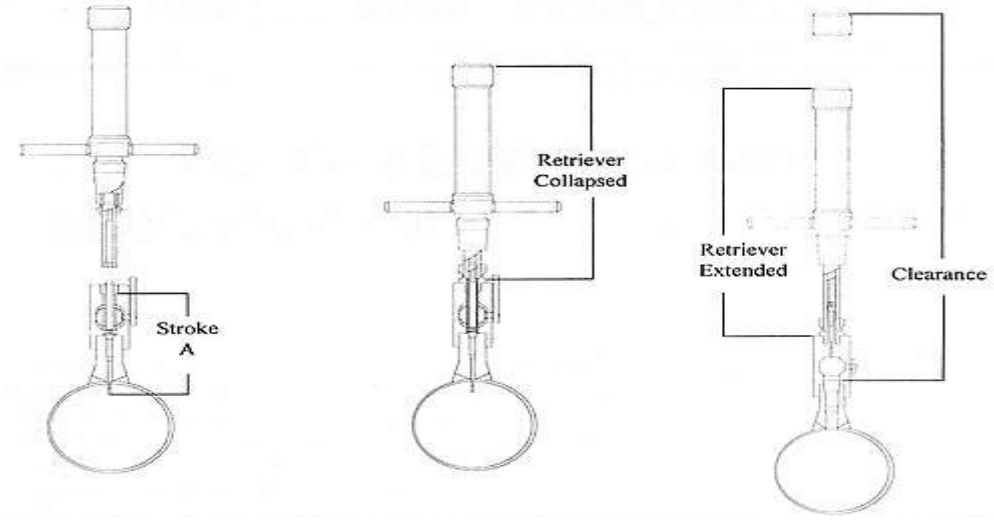
Retriever and Service Valve Kits include a heavy duty carrying case, maintenance tools and spare seals. A comprehensive Operation and Maintenance Manual is also included. Seal and Repair Kits are available separately at a moderate cost.

Operator training is minimal and is easily achieved once the basic principles of operation are understood. Training courses are available both on-site and off-site as required.

BACK TO ACCESS FITTINGS MENU

SCROLL DOWN FOR SECOND PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk



Stroke mm	Max Probe Length mm	Total Length		Clearance	Pressure Rating/Part Numbers		
		Collapsed	Extended		100 Bars	250 Bars	400 Bars
450	200	648	1,108	1,362	700501	700601	700801
630	406	826	1.463	1.713	700502	700602	700802
830	612	1.004	1,818	2,073	700503	700603	700803
940	711	1.130	2.073	2.323	700504	700604	700804
1.224	1.016	1.435	2.683	2.957	700505	700605	700805
1.530	1.320	1.740	3.292	3.546	700506	700606	700806

These maximum probe dimensions are only valid with 5.25 inch Flarweld and Buttweld Access Fittings. For maximum probe length with other Access Fitting configurations contact our sales office.

HOW TO ORDER

1. Retrievers are selected by the length of stroke required. The stroke is the distance the Plug Assembly and Probe must travel from within the Access Fitting body, through the Service Valve allowing the valve to be closed.

2. From figure A determine the Retriever stroke length required to retrieve the maximum length probe.

Spare Parts		Options	
Part Number	Description	Part Number	Description
700084	Retriever Seal Kit	700674	Divertor Hose Assembly - 3M
700085	Retriever Repair Kit	700676	Divertor Hose Assembly - 8M
700047	Safety Hammer	700677	Divertor Hose Assembly - 15M
700066	Head Bar	700678	Surge Tube Assembly
700060	Retainer Clamp	700752	Field Operators Tool Kit

BACK TO ACCESS FITTINGS MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Two-Inch System
Service Valve Kits



Service valves are required to connect the retriever tool to the Access Fitting to be serviced; its primary function is to contain the line pressure whilst the monitoring probe/injection device is replaced or removed. Designed for ease of use in connection with a Retriever Tool, Service Valves are ball type valves with full opening port and feature two Bleed Valves which permit easier operation at high pressures. One valve allows pressure equalisation on both sides of the valve, thus allowing the valve to be opened without torque problems. The second valve allows pressure or product to be bled to atmosphere or for product sampling.

Service Valves are available rated for 250 Bar (3600psi) and 400 Bar (5700psi). Service Valves rated 250bar are extremely compact with a total weight of 7 kilos.

ALL SERVICE VALVES COMPLY WITH NACE MR-01-75 (92 Rev) REQUIRMENTS FOR MATERIALS SUITABLE FOR USE IN SOUR SERVICE CONDITIONS.

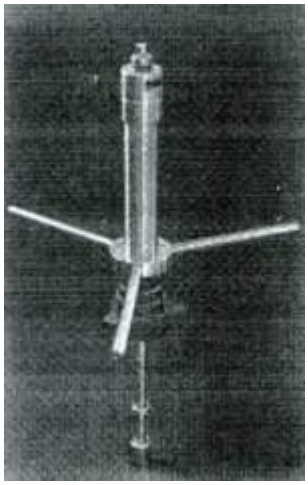
How to order:

- Service Valve Kit - 250 Bar - Part No 700187
- Service Valve Kit - 400 Bar - Part No 700191

SPARE PARTS		
Description		Material
Service Valve Repair Kit	250 Bar (3600 psi)	700051
Service Valve Seal Kit	250 Bar (3600psi)	700052
Service Valve Repair Kit	400 Bar (5700psi)	700053
Service Valve Seal Kit	400 Bar (5700psi)	700054

BACK TO ACCESS FITTINGS MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk



Hot Tap Tool

The Hot Tap Tool provides a safe and reliable method of hot tapping high pressure access fittings on presented pipelines or vessels.

OPERATION

A Special cutter assembly is installed in the access fitting previously welded onto the pipe. To tap a hole through the pipe wall, a service valve is installed on to the fitting. This allows the cutter fitting to be isolated if necessary. The hot tap tool is mounted onto the service valve and mated to the cutter. The drive screw on the hot tap tool puts pressure onto the cutter as the tool shaft is rotated to cut through the pipe wall. After the hole is cut through the pipe wall, the tool is removed from the valve and the retrieval tool is then used to pull the cutter assembly and pipe plug from the fitting. Shavings and cuttings are removed using swabs or brushes.

The hot tap procedure may be expedited by the use of an air operated drill motor to turn the cutter shaft.

Safety is enhanced because the cutter is isolated from the atmosphere by a service valve. At any time in the procedure the cutter drive shaft may be retracted and the fitting and its contents isolated from the atmosphere by closing the service valve.

The hot tap tool is compatible with other major manufacturer's access fitting assemblies.

Part HA102102 Components	
Description	Part Number
Bore Reamer Assembly	102004
HP Thread Chaser with Adaptor	8002
Seat Reaming Assembly	7282A
Weld and Seal Test Fixture	8004
Cutter Assembly - HP 5.25 Nipple	7305G
HP Cutter Test for CT Cutter Test Assembly	7306A
Bushing Insertion Tool	7241A
Hot Tap and Extraction Tool Test Assembly	7307A
Hot Tap Turning Handle	7308A
Over shot for Cutter	7244A

BACK TO ACCESS FITTINGS MENU
SCROLL DOWN FOR SECOND PAGE

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

Adaptor for Tools	102001158
Magnetic Swab Assembly	102003
3/16" Allen Wrench	PR6352
Spanner Wrench	PR6356
1⅜" Hex Socket	PR6433
Snap Ring Pliers	PR2283
Seal Insertion Ring	7249A
Brass Hammer	PR6358
3/32" Allen Wrench	PR2291
Snap Ring Pliers	PR2297
Quick Coupling (female)	PR1294
½" Drive, socket "T" Handle	PR6357
Case	PR2399
Seal Repair Kit	7213A

The above tools are furnished as standard equipment with each complete Hot Tap Tool Kit. In addition common tools such as 3/16" Punch, large Crescent Wrench, large Screw Driver may be necessary.

BACK TO ACCESS FITTINGS MENU

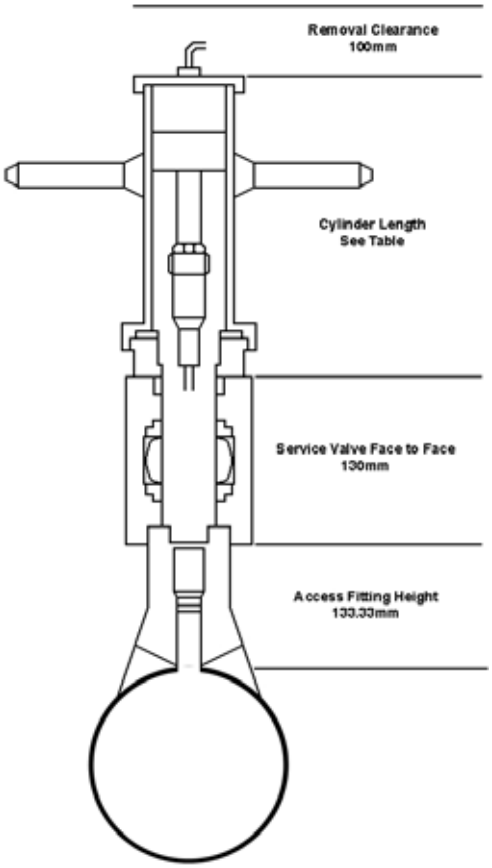
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

HYDRALIC RETRIEVER AND SERVICE VALVE KIT MODEL HPH

The Model HPH Hydraulic Retriever Tool is a single cylinder retriever of fixed length which is equilibrated at the same pressure as the pipeline or vessel to be serviced. An internal piston may be moved up or down by changing the pressure in the upper barrel of the retriever. Pressure differential of a few PSI is sufficient to move the piston. Downward movement is obtained by pumping oil into the upper part of the retriever using a small portable pump; upward motion is achieved by returning oil to the oil tank. Internal safety devices are provided to prevent excessive pressure differentials from being developed across the piston.

A Socket Adaptor Assembly is attached to the Internal piston. A Pilot on this Adaptor mates the assembly to the standard Triseal® 2" System Solid or Hollow plug.

When the piston is moved to the lower part of the retriever it may be connected to the retriever barrel which is then turned to screw or unscrew the Plug Assembly from the Triseal® access fitting body.



MINIMUM CLEARANCE REQUIREMENTS, MINIMUM WEIGHT AND FULL COMPATIBILITY WITH ALL GENERIC ACCESS FITTINGS ARE MAJOR FEATURES OF THE HPH RETRIEVER TOOL

Triseal ® is the Registered Tradename of Rose Corrosion Services Limited

BACK TO ACCESS FITTINGS MENU

RCSL
ROSE CORROSION SERVICES LIMITED
1 THE GALLOWAY CENTRE, HAMBRIDGE LANE, NEWBURY, BERKS, RG14 5TL ENGLAND
TELEPHONE (01635) 552225 FAX: (01635) 568690 EMAIL: rcsl@rosecorrosionservices.co.uk

HPH Retriever Ordering Information

250 Bar Maximum Working Pressure

Retriever Kit Part Number	700834	700835	700836	700837	700838	700839	700840	700841	700842
Maximum Probe Length	130mm 5.11”	200mm 7.87”	300mm 11.81”	400mm 15.74”	500mm 19.68”	600mm 23.62”	700mm 27.55”	800mm 31.50”	900mm 35.43”
Removal Clearance	840mm	945mm	1096mm	1245mm	1395mm	1545mm	1695mm	1845mm	1995mm
Retriever Cylinder Length	510mm	615mm	765mm	915mm	1065mm	1215mm	1365mm	1515mm	1665mm
Retriever Weight	15.75 kg	17.20 kg	18.70 kg	20.50 kg	22.01 kg	23.70 kg	25.60 kg	27.70 kg	29.85 kg
Retriever Kit Weight	46.50 kg	48.00 kg	49.50 kg	51.50 kg	53.50 kg	55.50 kg	58.00 kg	60.50 kg	64.00 kg

450 Bar Maximum Working Pressure

Retriever Kit Part Number	701100	701101	701102	701103	701104	701105	701106	701107	701108
Maximum Probe Length	130mm 5.11”	200mm 7.87”	300mm 11.81”	400mm 15.74”	500mm 19.68”	600mm 23.62”	700mm 27.55”	800mm 31.50”	900mm 35.43”
Removal Clearance	840mm	945mm	1096mm	1245mm	1395mm	1545mm	1695mm	1845mm	1995mm
Retriever Cylinder Length	510mm	615mm	765mm	915mm	1065mm	1215mm	1365mm	1515mm	1665mm
Retriever Weight	20.75 kg	22.20 kg	23.70 kg	25.50 kg	27.01 kg	28.70 kg	31.60 kg	32.70 kg	39.85 kg
Retriever Kit Weight	54.50 kg	56.00 kg	57.50 kg	59.50 kg	61.50 kg	63.50 kg	64.00 kg	68.50 kg	72.00 kg

HOW TO ORDER:

1. **Retriever size is determined by the length of piston movement required within the retriever cylinder. This is the distance the plug assembly and probe must travel from within the access fitting body and through the service valve allowing the valve to be closed.**
2. **Determine the maximum working pressure required**
3. **Determine the maximum probe length required to be retrieved.**
4. **From the above table select the most suitable kit Part Number. Order by Kit Part Number.**

SPARE PARTS

250 Bar	
Description	**Part Number**
Retriever Seal Kit	**700868**
Service Valve Seal Kit	**700877**
Hydraulic Pump	**700842**
Three Way Valve	**700844**

450 Bar	
Description	**Part Number**
Retriever Seal Kit	**701109**
Service Valve Seal Kit	**701110**
Hydraulic Pump	**701111**
Three Way Valve	**701112**

BACK TO ACCESS FITTINGS MENU