

# COSASCO® ACCESS FITTING ASSEMBLIES

## Model 52

The Cosasco® Access Fitting Assembly is the key to the concept of “Access under pressure - any time, any place”. When used with a Cosasco Retriever and Service Valve, the Access Fitting Assembly permits safe, easy insertion and retrieval of corrosion and erosion monitoring systems as well as preventive maintenance devices for injecting inhibitors or for sampling, etc. while under full operating pressure. The model 52 Butt weld, (aka. Butt weldolet) fitting is designed to be butt welded directly to a 2” schedule 160 pipe end. Possible configurations include welding to an industry standard “Weldolet” fitting, which is then welded to a pipe or vessel, or welding to a 2” schedule 160 butt weld ‘Tee’.



### Access Fitting Mounting

Mounting — Weldolet, 2” Sch. 160

Direct Welding to the End of Pipe, Tee Piece, or Weldolet

### Temperature and Pressure Ratings

Standard Temperature Rating with Viton/Teflon Seals:  
— From -15° F (-26° C) Up To +400° F (+204° C)

Available Temperature Rating with Optional Seals:  
— From -70° F (-56° C) Up To +450° F (+232° C)

Pressure Rating — 6000 PSI / 41.3 MPa Working

### Standards

Meets NACE MR0175 and MR0103

Canadian Registration (CRN) and Conformity to Pressure Equipment Directive (PED)

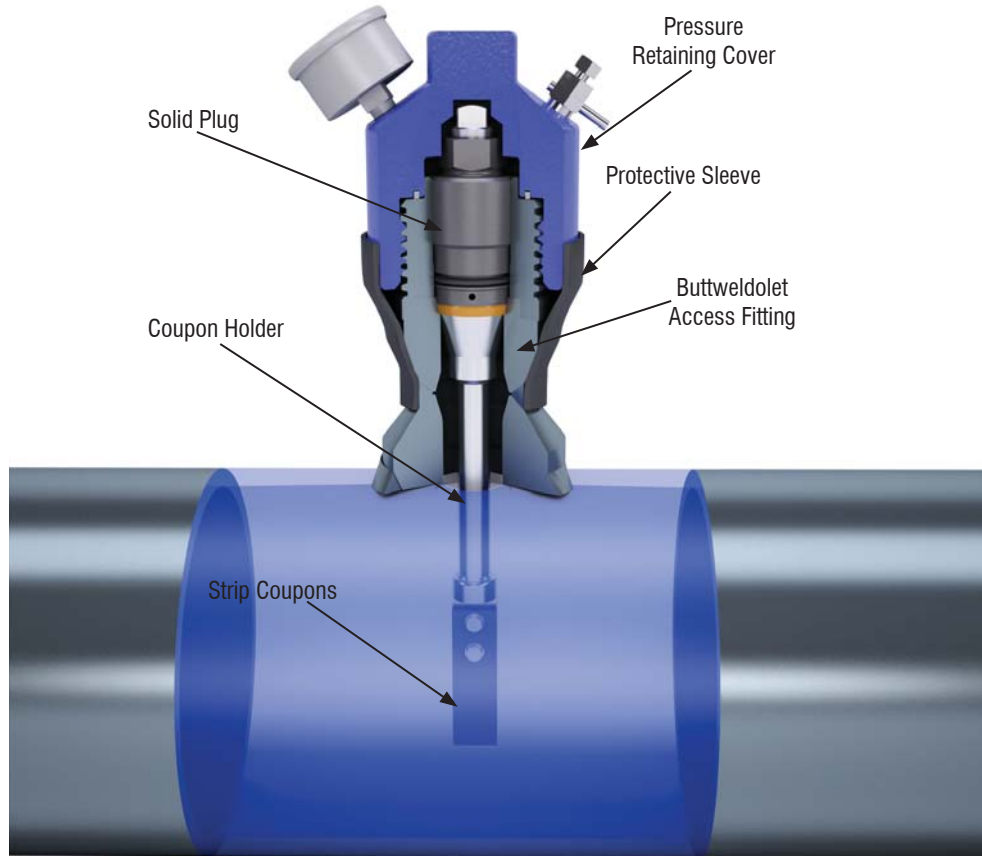
### Options

Available with ACME Threaded and Severe Service Internal Configurations

Optional NPT, Flanged, Socketweld, and Butt weld Tee Connection

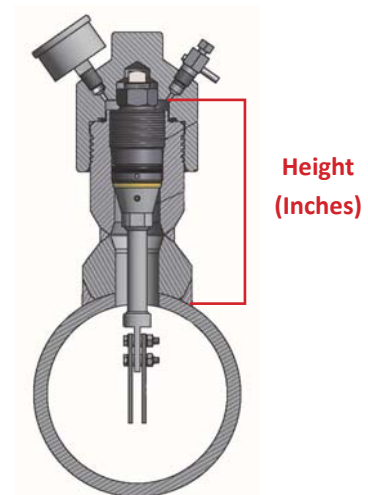
## Access Fitting General Assembly

The Cosasco Access Fitting Assembly consists of two major parts: (1) the Body; and (2) the Plug Assembly. A protective cover and sleeve are available and recommended for all applications. Optional side tee configurations are also available when chemical injection or fluid sampling is required.



## Dimensions

| Body Style | Weight<br>lbs. | Body Height<br>Inches | Height with<br>Weldolet<br>Inches |
|------------|----------------|-----------------------|-----------------------------------|
| (Non-Tee)  | 4.5            | 4.00                  | 6.25                              |
| 1/4" Tee   | 5.5            | 5.00                  | 7.25                              |
| 1/2" Tee   | 7.75           | 6.00                  | 8.25                              |
| 3/4" Tee   | 7.75           | 6.00                  | 8.25                              |
| 1" Tee     | 7.75           | 6.00                  | 8.25                              |



## Access Fitting Options

### Side Tee for Chemical Injection

When injection of treatment chemicals or sampling of the process is required it is preferable to use an access fitting with side tee. They are also used with sand monitoring probes. Tee fittings incorporate a 1/4", 1/2", 3/4", or 1" NPT threaded outlet on the side of the fitting body, with optional Socketweld, Butt weld, and Flanged outlet to suit the type of service. The addition of a tee adds between 1 and 3 inches to the height of the standard access fitting (5.25") according to the diameter and rating. See individual datasheet for more details.



Optional ANSI RF Side Tee Shown

### Internal ACME Threaded (AT) Access Fittings Assemblies

Cosasco ACME Threaded (AT) access fittings have internal female ACME threads that receive either a solid or hollow male ACME threaded plug. The ACME Threaded access fittings are advantageous in applications where the process contains solids and debris. Access Fittings that are mounted bottom-of-line are especially susceptible to solids getting lodged in the threads of the plug assembly. ACME threads have coarser threads with a larger pitch and a narrower angle than standard v-threads. This helps prevent the plug assembly from getting jammed in the access fitting due to debris caught in between the threads. See individual data sheet for more details and ordering information.



Access Fitting with internal Acme threads

### Severe Service (CR) Access Fitting Assemblies

Cosasco Severe Service (CR) Access Fittings have a patented corrosion resistant insert to withstand severe applications. By using an insert made of Hastelloy C276, the seal seat areas and threads are protected from corrosion damage. Hastelloy C276 is a strong passive film forming material. Consequently, as a cathode in a galvanic cell, it tends to pass very little current. This tendency and the large anode-to-cathode area ratio eliminate galvanic corrosion. For non-tee access fittings only (Consult factory for Side-Tee options). See individual data sheet for more details.



Patented CR Fitting with Highly Corrosion Resistant Alloy Insert

### High Pressure Retaining Covers and Protective Sleeves (highly recommended for all Access Fitting Assemblies)

Cosasco high pressure retaining covers with pressure gauge and bleed plug offer both protection and an extra layer of safety with a pressure rating of up to 10,000 PSI. A viton o-ring creates a tight seal retaining any pressure that may build up. The bleed plug allows any pressure accumulation to be released prior to the cover being backed off. The pressure gauge is used to indicate if there is any pressure build up.

Protective Rubber Sleeves provide an additional layer of protection, especially for bottom of the line locations. The sleeve protects against the ingress or accumulation of water or moisture between the PRC and Access Fitting.



High Pressure Retaining Cover



Tapered Sleeve

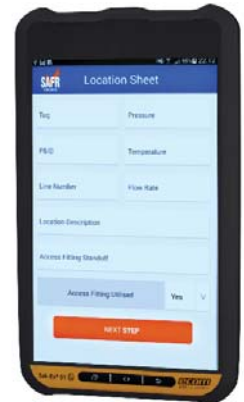
## Service Kits

Routine servicing of access fittings is integral to ensure safe installation and retrieval of corrosion monitoring and chemical injection devices. Cosasco highly recommends the carrier plug (solid/hollow) to be replaced after three insertions or if damaged. A primary packing should be replaced after every service, and for a solid carrier plug, the secondary O' ring seal if it is excessively worn or damaged. CosascoCare Service kits provide the necessary replacement parts for routine maintenance of each access fitting location.

## SAFR Services

The Cosasco SAFR (Surveyed Access Fitting Register) program is designed to assist in the short and long term maintenance of access fittings. The program can be used solely to audit systems, or in tandem with service campaigns such as coupon and data retrieval. With life extension of assets and the general increase in number of monitoring systems, it's increasingly important that systems are surveyed to ensure that material selection is fit for purpose as well as the overall physical condition of the fitting.

Non-OEM parts exist in facilities where third part or competing contractors carry out maintenance and monitoring. This can lead to serious consequences as often times materials installed do not match the material retrieved. Simple errors can lead to unmanaged risk. Correct device selection and orientation is extremely important to achieving reliable data and ensuring plant integrity.



SAFR Tablet

## Cosasco Care Service Plans & Extended Warranty

Cosasco Care Service Plans and Extended Warranty offer a broad spectrum of services to make sure your assets and plant operations are running at their peak performance and under the safest conditions. Cosasco Care Extended Warranty comes as standard with Cosasco Care Essential, Plus, and Premium Service Plans. All Service plans include access to the Cosasco SAFR (Surveyed Access Fitting Register) maintenance program; offline installation, retrieval and maintenance of coupons and probes; coupon analysis and reporting; technical support; Cosasco Data Offline software support; data management and reporting; and safety awareness training. Contact our Cosasco Care team for more details and pricing.



Cosasco Care Services

# MODEL 52

## Ordering Information

| Model              | High Pressure Access Fitting Assembly   |                            |   |   |    |         |
|--------------------|---|----------------------------|---|---|----|---------|
| 52<br>52CR<br>52AT | ButtWeldolet<br>ButtWeldolet – Severe Service<br>ButtWeldolet – ACME Threaded   |                            |   |   |    |         |
| <b>Code</b>        | <b>Plug Assembly- Enter Code For Plug Type From Options Below</b>   |                            |   |   |    |         |
| XXX                | Type - 1ST Digit  | Alloy Material - 2ND Digit |   | Packing Seal - 3RD Digit  |    |         |
|                    | 0   | Not Required               |   | Not Required  |    |         |
|                    | 1   | Solid                      |   | Viton O-Ring Teflon Primary Packing * -15 to 400° F (-26 to 204°C)              |    |         |
|                    | 2   | Hollow                     | 3   | Ethylene Propylene O-Ring Vespel Primary Packing*-70 to 250°F (-56 to 121°C)    |    |         |
|                    |   |                            | 4   | Kalrez O-Ring Vespel Primary Packing * -15 to 450°F (-26 to 232°C)              |    |         |
|                    |   |                            | 5   | No O-Ring Nitronic 60 Primary Packing * -50 to 450°F (-45 to 232°C)             |    |         |
|                    |   |                            | 6   | Hydrin O-Ring Teflon Primary Packing * -40 to 275°F (-40 to 135°C)              |    |         |
|                    |   |                            | 7   | Nitrile O-Ring Teflon Primary Packing * -30 to 250°F (-35 to 121°C)             |    |         |
|                    |   |                            |   | Ethylene Propylene O-Ring, Teflon Primary Packing * -70 to 250°F (-56 to 121°C) |    |         |
|                    |   |                            |   | EDR Viton O-Ring Teflon Primary Packing *-15 to 400° F (-26 to 204°C)           |    |         |
|                    |   |                            |   | Kalrez O-Ring Teflon Primary Packing * -15 to 450° F (-26 to 232°C)             |    |         |
|                    |   |                            |   | HNBR EOL 101 O-Ring Teflon Primary Packing - * - 13 to 320°F (-25 to 160°C)     |    |         |
|                    |   |                            |   | HNBR EOL 985 O-Ring Teflon Primary Packing - * - 67 to 302°F (-55 to 150°C)     |    |         |
|                    |   |                            | AFLAS 69/90 O-Ring Teflon Primary Packing - * - 32 to 392°F (0 to 200°C)        |   |    |         |
|                    |   |                            | D Viton "B" (VB185-70) Teflon Primary Packing - * - 15 to 400°F (-26 to 204 °C) |   |    |         |
| <b>Code</b>        | <b>Side Tee Size</b>  |                            |   |   |    |         |
| 0                  | Non-Tee   |                            |   |   |    |         |
| 1                  | ¼" Tee (Not available for Flanged (FL) Side Tee)  |                            |   |   |    |         |
| 2                  | ½" Tee  |                            |   |   |    |         |
| 3                  | ¾" Tee  |                            |   |   |    |         |
| 4                  | 1" Tee  |                            |   |   |    |         |
| <b>Code</b>        | <b>Optional Side Tee Configuration</b>  |                            |   |   |    |         |
| SW                 | Socketweld Tee  |                            |   |   |    |         |
| FL71               | 150# RF   |                            |   |   |    |         |
| FL72               | 300# RF   |                            |   |   |    |         |
| FL73               | 4/600# RF   |                            |   |   |    |         |
| FL74               | 9/1500# RF  |                            |   |   |    |         |
| FL75               | 2500# RF  |                            |   |   |    |         |
| FL41               | 300# RJ   |                            |   |   |    |         |
| FL42               | 4/600# RJ   |                            |   |   |    |         |
| FL43               | 9/1500# RJ  |                            |   |   |    |         |
| FL44               | 2500# RJ  |                            |   |   |    |         |
| BW40               | Schedule 40 (Standard) Butt weld Tee  |                            |   |   |    |         |
| BW80               | Schedule 80 (Extra Strong) Butt weld Tee  |                            |   |   |    |         |
| BW160              | Schedule 160 (Not applicable for ¼") Butt weld Tee  |                            |   |   |    |         |
| BWXX               | Schedule XX (Double Extra Strong) (Not applicable for ¼") Butt weld Tee   |                            |   |   |    |         |
| <b>Code</b>        | <b>Body Material</b>  |                            |   |   |    |         |
| K03504             | ASTM A105 Carbon Steel  |                            |   |   |    |         |
| K03011             | ASTM A350 LF2 Carbon Steel  |                            |   |   |    |         |
| S31600             | AISI 316 Stainless Steel  |                            |   |   |    |         |
| S31803             | Duplex Stainless Steel  |                            |   |   |    |         |
| <b>Code</b>        | <b>Secondary Pressure Retaining Covers**</b>  |                            |   |   |    |         |
| 10                 | Pressure Retaining Cover With Bleed Plug and Pressure Gauge P/N 740090 10,000 PSI max.  |                            |   |   |    |         |
| 11                 | Pressure Retaining Cover With Bleed Plug, Pressure Gauge and ½" NPT Center Hole for Standard Probe Adapter P/N 740093 2500 PSI max. (When used w/probe adapter).          |                            |   |   |    |         |
| 12                 | Pressure Retaining Cover With Bleed Plug, Pressure Gauge and Center Hole for High Pressure Probe Adapter P/N 740095 (must use high pressure probe adapter)10,000 PSI max. |                            |   |   |    |         |
| 52                 | 111   | 2                          | FL71  | K03504  | 10 | Example |

\* Nominal Temperature Range

\*\*Optional materials, seals, and pressure gauges are available. See ordering information on next page for details.



# MODEL 52

## Service Kit Ordering Information

| Model  |                            |  |                         |   |                          |  |        |   |   |   |   |         |
|--------|----------------------------|--|-------------------------|---|--------------------------|--|--------|---|---|---|---|---------|
| 740138 | Access Fitting Service Kit |  |                         |   |                          |  |        |   |   |   |   |         |
|        | <b>Code</b>                | <b>Maintenance Level*</b>  |                         |   |                          |  |        |   |   |   |   |         |
|        | 1                          | Stage 1  |                         |   |                          |  |        |   |   |   |   |         |
|        | 2                          | Stage 2  |                         |   |                          |  |        |   |   |   |   |         |
|        | <b>Code</b>                | <b>Type of Monitoring Location</b>   |                         |   |                          |  |        |   |   |   |   |         |
|        | CPN                        | Coupon   |                         |   |                          |  |        |   |   |   |   |         |
|        | ERP                        | Electrical Resistance (ER) Probe   |                         |   |                          |  |        |   |   |   |   |         |
|        | LPR                        | Linear Polarization Resistance (LPR) Probe   |                         |   |                          |  |        |   |   |   |   |         |
|        | INJ                        | Chemical Injection   |                         |   |                          |  |        |   |   |   |   |         |
|        | BIO                        | Bio-probe  |                         |   |                          |  |        |   |   |   |   |         |
|        | <b>Code</b>                | <b>Plug Assembly – Enter code for plug type from options below</b>   |                         |   |                          |  |        |   |   |   |   |         |
|        |                            | Type (1st Digit)   | Alloy Mat'l (2nd Digit) |   | Packing Seal (3rd Digit) |  |        |   |   |   |   |         |
|        |                            | 0  | Not Req.                |   | 0                        | Not Req.   |        |   |   |   |   |         |
|        |                            | 1  | Solid                   |   | 1                        | 316/316L S.S.  |        |   |   |   |   |         |
|        |                            | 2  | Hollow                  |   | 3                        | Hastelloy C-276  |        |   |   |   |   |         |
|        |                            |  |                         |   | 4                        | Nitronic 60  |        |   |   |   |   |         |
|        |                            |  |                         |   | 5                        | Carbon Steel   |        |   |   |   |   |         |
|        |                            |  |                         |   | 6                        | Inconel 625  |        |   |   |   |   |         |
|        |                            |  |                         |   | 7                        | 2205 Duplex S.S.   |        |   |   |   |   |         |
|        | XXX                        |  |                         |   |                          | 7 Nitrile O-Ring Teflon Primary Packing - ** -30 to 250°F (-35 to 121°C)             |        |   |   |   |   |         |
|        |                            |  |                         |   |                          | 7 Ethylene Propylene O-Ring, Teflon Primary Packing - ** -70 to 250°F (-56 to 121°C) |        |   |   |   |   |         |
|        |                            |  |                         |   |                          | 8 EDR Viton O-Ring Teflon Primary Packing - ** -15 to 400° F (-26 to 204°C)          |        |   |   |   |   |         |
|        |                            |  |                         |   |                          | 9 Kalrez O-Ring Teflon Primary Packing - ** -15 to 450° F (-26 to 232°C)             |        |   |   |   |   |         |
|        |                            |  |                         |   | A                        | HNBR EOL 101 O-Ring Teflon Primary Packing - ** -13 to 320° F (-25 to 160° C)        |        |   |   |   |   |         |
|        |                            |  |                         |   | B                        | HNBR EOL 985 O-Ring Teflon Primary Packing - ** -67 to 302° F (-55 to 150° C)        |        |   |   |   |   |         |
|        |                            |  |                         |   | C                        | AFLAS 69/90 O-Ring Teflon Primary Packing ** 32 to 392° F (0 to 200° C)              |        |   |   |   |   |         |
|        |                            |  |                         |   | D                        | Viton "B" (VB185-70) Teflon Primary Packing ** 15 to 400° F (-26 to 204°C)           |        |   |   |   |   |         |
|        | <b>Code</b>                | <b>Seal Material Option for Pressure Retaining Cover</b>   |                         |   |                          |  |        |   |   |   |   |         |
|        | 1                          | Viton  |                         |   |                          |  |        |   |   |   |   |         |
|        | 2                          | Ethylene Propylene   |                         |   |                          |  |        |   |   |   |   |         |
|        | 3                          | Kalrez   |                         |   |                          |  |        |   |   |   |   |         |
|        | 5                          | Epchlorohydrin   |                         |   |                          |  |        |   |   |   |   |         |
|        | 6                          | Nitrile  |                         |   |                          |  |        |   |   |   |   |         |
|        | 8                          | EDR Viton  |                         |   |                          |  |        |   |   |   |   |         |
|        | A                          | HNBR EOL 101 O-Ring Teflon Primary Packing - * -13 to 320°F (-25 to 160°C)   |                         |   |                          |  |        |   |   |   |   |         |
|        | B                          | HNBR EOL 985 O-Ring Teflon Primary Packing - * -13 to 320°F (-25 to 160°C)   |                         |   |                          |  |        |   |   |   |   |         |
|        | C                          | AFLAS 36/90 O-Ring Teflon Primary Packing - * 32 to 392°F (0 to 200°C)   |                         |   |                          |  |        |   |   |   |   |         |
|        | <b>Code</b>                | <b>Coupon Type (see table on next page for coupon options-for LPR and Bio-Probes enter Element Alloy Code, Enter 0 for ER Probes and Chemical Injection)</b> |                         |   |                          |  |        |   |   |   |   |         |
|        | XXXXXX                     | LPR Electrodes-Enter Element Alloy code  |                         |   |                          |  |        |   |   |   |   |         |
|        | XXXXXX                     | Bio-Probe Stud-Enter Element Alloy Code  |                         |   |                          |  |        |   |   |   |   |         |
| 740138 | 1                          | CPN  | 111                     | 1 | CI                       | S3   | G10180 | 0 | 0 | 0 | 1 | Example |
| 740138 | 1                          | ERP  | 211                     | 1 | 0                        |  |        |   |   |   |   | Example |
| 740138 | 1                          | LPR  | 211                     | 1 | K03005                   |  |        |   |   |   |   | Example |
| 740138 | 1                          | INJ  | 111                     | 1 | 0                        |  |        |   |   |   |   | Example |
| 740138 | 1                          | BIO  | 111                     | 1 | K03005                   |  |        |   |   |   |   | Example |

\* Stage 1 Service Kit includes basic replacement parts and is recommended for every pull/change out. Stage 2 Service Kit is for a complete overhaul and recommended for every 3rd pull/change out. Note, this is a minimum recommended maintenance requirement, Stage 2 may be required at more frequent intervals based on exposure time and type of process media.

\*\* Nominal Temperature Range

# MODEL 52

## Coupon Options

| Model       |  |        |   |   |   |   |         |
|-------------|--|--------|---|---|---|---|---------|
| CI          | Insulated Coupon Assembly                    |        |   |   |   |   |         |
| <b>Code</b> | <b>Coupon Type</b>                           |        |   |   |   |   |         |
| S3          | 3" Strip Coupon (2 coupons included)         |        |   |   |   |   |         |
| S6          | 6" Strip Coupon (2 coupons included)         |        |   |   |   |   |         |
| L           | Ladder Strip Coupon (6 coupons included)     |        |   |   |   |   |         |
| D           | Flush Disc Coupon (1 coupon included)        |        |   |   |   |   |         |
| MD          | Multiple Disc Coupon (3 coupons included)    |        |   |   |   |   |         |
| SC          | 3" Strip Scale Coupon (2 coupons included)   |        |   |   |   |   |         |
| <b>Code</b> | <b>Alloy</b>                                 |        |   |   |   |   |         |
| G10180      | 1018 Mild Steel                              |        |   |   |   |   |         |
| S30300      | 303 Stainless Steel                          |        |   |   |   |   |         |
| S30400      | 304 Stainless Steel                          |        |   |   |   |   |         |
| S30403      | 304L Stainless Steel                         |        |   |   |   |   |         |
| S31600      | 316 Stainless Steel                          |        |   |   |   |   |         |
| S31603      | 316L Stainless Steel                         |        |   |   |   |   |         |
| S32100      | 321 Stainless Steel                          |        |   |   |   |   |         |
| S41000      | 410 Stainless Steel                          |        |   |   |   |   |         |
| S43000      | 430 Stainless Steel                          |        |   |   |   |   |         |
| <b>Code</b> | <b>Surface Finish</b>                        |        |   |   |   |   |         |
| 0           | Ground                                       |        |   |   |   |   |         |
| 1           | Directional Sanded                           |        |   |   |   |   |         |
| 2           | Glass Bead Blast                             |        |   |   |   |   |         |
| <b>Code</b> | <b>Insulators</b>                            |        |   |   |   |   |         |
| 0           | Standard Nylon Insulators (250°F)            |        |   |   |   |   |         |
| 1           | High Temperature Ceramic Insulators (1475°F) |        |   |   |   |   |         |
| 2           | Teflon® Insulators (500°F)                   |        |   |   |   |   |         |
| 3           | No Insulators - Only option for disc coupons |        |   |   |   |   |         |
| <b>Code</b> | <b>Handling</b>                              |        |   |   |   |   |         |
| 0           | Pre-weighed                                  |        |   |   |   |   |         |
| 1           | Un-weighed                                   |        |   |   |   |   |         |
| <b>Code</b> | <b>Special Options</b>                       |        |   |   |   |   |         |
| 0           | No Special Option                            |        |   |   |   |   |         |
| 1           | Stamp Serial Number on Both Sides            |        |   |   |   |   |         |
| CI          | S3   | G10180 | 0 | 0 | 0 | 1 | Example |

**Cosasco**  
 11841 Smith Avenue  
 Santa Fe Springs, CA 90670, USA  
 Tel: 1-562-949-0123  
 Email: sales@cosasco.com  
 Web Site: www.cosasco.com

©Rohrbach Cosasco Systems, Inc. All rights reserved

The contents of this publication are presented for information purposes only, and while effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described wherein or their use or applicability. We reserve the right to modify or improve the designs or specifications of our products at any time without notice.

**COSASCO®**



FM 10694

52-DSrevC  
 Rev. Date 07/18/2017

[www.cosasco.com](http://www.cosasco.com)