

COSASCO® ACCESS FITTING ASSEMBLIES

Request A Quote

Model 53

The Cosasco® Access Fitting Assembly is the key to the concept of “Access under pressure - anytime, anyplace”. 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 operation pressure. The model 53 Socketweld fitting is designed to be socket welded directly to a 2” socket end. Possible configurations include welding to an industry standard “Sockolet” fitting, which is then welded to a pipe or vessel, or welding to a 2” schedule 160 socket weld ‘Tee”.



Access Fitting Mounting

Mounting — Socketweld

Direct Welding to Sockolet on Pipe or Vessel where Sockolet is Customer Specification, Otherwise Model 50 is Preferable

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 Buttweld Tee Connection

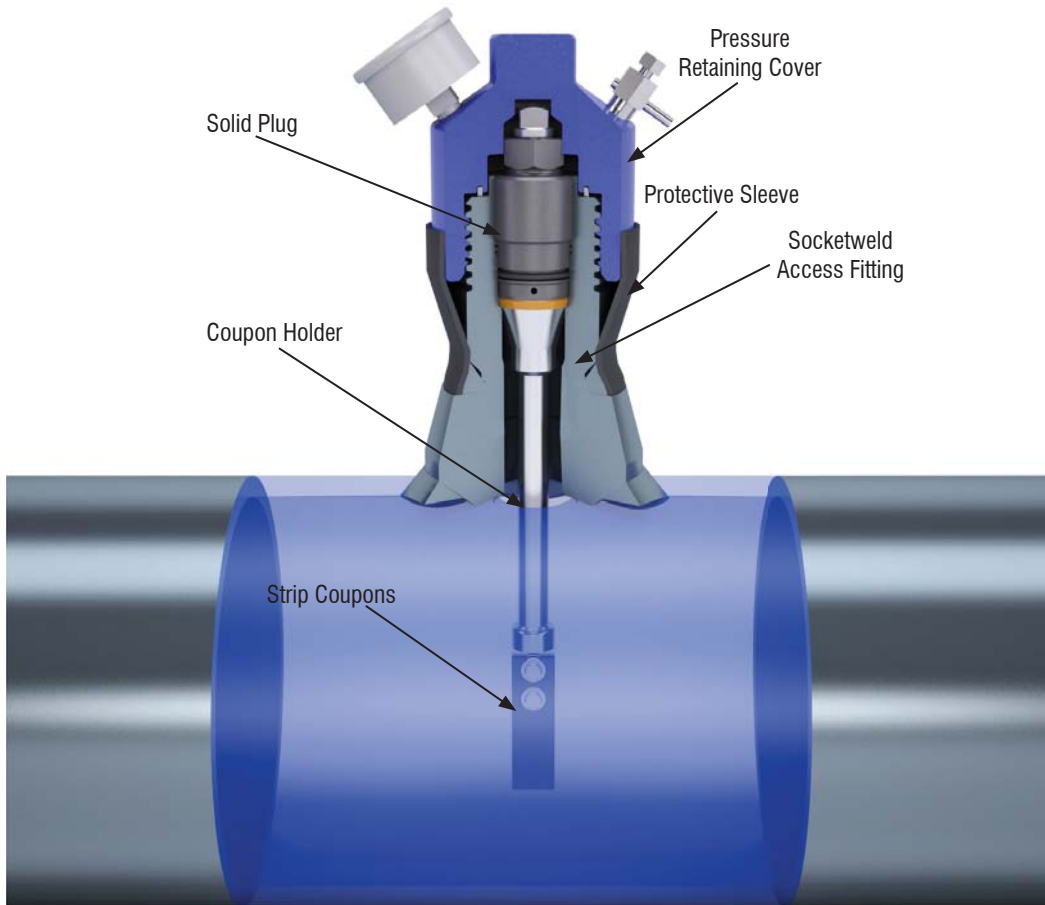


COSASCO®

MODEL 53

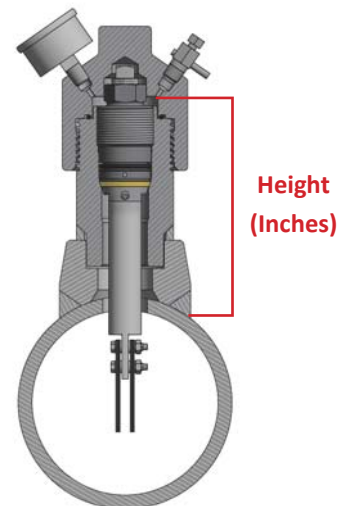
Access Fitting General Assembly

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 lbs.	Height Inches
(Non-Tee)	4.5	6.25
1/4" Tee	4.5	6.25
1/2" Tee	6.0	7.25
3/4" Tee	6.5	7.25
1" Tee	7.0	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

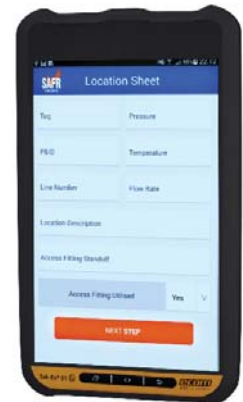
Service Kits

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 53

Ordering Information

Model	High Pressure Access Fitting Assembly					
53	Socketweld					
53CR	Socketweld – Severe Service (Non-Tee option only – consult Cosasco factory for Side-Tee options)					
53AT	Socketweld – ACME Threaded					
Code	Plug Assembly- Enter Code For Plug Type From Options Below					
XXX	Type (1st Digit)	Alloy Mat'l (2nd Digit)		Packing Seal (3rd Digit)		
	0	Not Req.	0	Not Req.	0	Not Required
	1	Solid	1	316/316L S.S.	1	Viton O-Ring Teflon Primary Packing * -15 to 400° F (-26 to 204°C)
	2	Hollow	3	Hastelloy C-276	2	Ethylene Propylene O-Ring VespeI Primary Packing *-70 to 250°F (-56 to 121°C)
			4	Nitronic 60	3	Kalrez O-Ring VespeI Primary Packing * -15 to 450°F (-26 to 232°C)
			5	Carbon Steel	4	No O-Ring Nitronic 60 Primary Packing * -50 to 450°F (-45 to 232°C)
			6	Inconel 625	5	Hydrin O-Ring Teflon Primary Packing * -40 to 275°F (-40 to 135°C)
			7	2205 Duplex S.S.	6	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)
Code	Side Tee Size					
0	Non-Tee					
1	1/4" Tee (Not available for Flanged (FL) Side Tee)					
2	1/2" Tee					
3	3/4" Tee					
4	1" Tee					
Code	Optional Side Tee Configuration					
SW	Socketweld Tee					
FL71	150# RF	} Flanged Side Tee configurations available for 1/2", 3/4" & 1 sizes only.				
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) Buttsweld Tee					
BW80	Schedule 80 (Extra Strong) Buttsweld Tee					
BW160	Schedule 160 (Not applicable for 1/4") Buttsweld Tee					
BWXX	Schedule XX (Double Extra Strong) (Not applicable for 1/4") Buttsweld Tee					
					} Required for 6000 PSI locations.	
Code	Body Material					
K03504	ASTM A105 Carbon Steel					
K03011	ASTM A350 LF2 Carbon Steel					
S31600	AISI 316 Stainless Steel					
S31803	Duplex Stainless Steel					
Code	Secondary Pressure Retaining Covers**					
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 1/2" 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.					
53	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 53

Service Kit Ordering Information

Model	Access Fitting Service Kit										
740138	Code	Maintenance Level*									
	1	Stage 1									
	2	Stage 2									
	Code	Type of Monitoring Location									
	CPN	Coupon									
	ERP	Electrical Resistance (ER) Probe									
	LPR	Linear Polarization Resistance (LPR) Probe									
	INJ	Chemical Injection									
	BIO	Bio-probe									
	Code	Plug Assembly – Enter code for plug type from options below									
XXX	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. 1 Viton O-Ring Teflon Primary Packing - ** -15 to 400° F (-26 to 204°C)						
	2	Hollow		3	Hastelloy C-276 2 Ethylene Propylene O-Ring Vespel Primary Packing - * -70 to 250°F (-56 to 121°C)						
			4	Nitronic 60 3 Kalrez O-Ring Vespel Primary Packing - ** -15 to 450°F (-26 to 232°C)							
			5	Carbon Steel 4 No O-Ring Nitronic 60 Primary Packing - ** -50 to 450°F (-45 to 232°C)							
			6	Inconel 625 5 Hydrin O-Ring Teflon Primary Packing - ** -40 to 275°F (-40 to 135°C)							
			7	2205 Duplex S.S. 6 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)					
Code	Seal Material Option for Pressure Retaining Cover										
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)										
Code	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)										
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 53

Coupon Options

Model							
CI	Insulated Coupon Assembly						
Code	Coupon Type						
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)						
Code	Alloy						
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						
Code	Surface Finish						
0	Ground						
1	Directional Sanded						
2	Glass Bead Blast						
Code	Insulators						
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						
Code	Handling						
0	Pre-weighed						
1	Un-weighed						
Code	Special Options						
0	No Special Option						
1	Stamp Serial Number on Both Sides						
CI	S3	G10180	0	0	0	1	Example

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