Model 50

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 Flarweld type Access Fitting is designed to be welded directly to the pipe or vessel. The fitting incorporates a radius to match the curvature of the pipe or vessel, with a maximum 1/16" weld gap. It also incorporates a thick body to provide adequate branch reinforcement area to help strengthen the weld joint. It is the most popular type of mounting configuration.







Access Fitting Mounting

Mounting — Flarweld with Integral Branch Reinforcement per ASME B31.3

Direct welding to pipe or vessel, most economical, most compact

Temperature and Pressure Ratings

Standard Temperature Rating with Viton/Teflon Seals: — From -15 $^{\circ}$ F (-26 $^{\circ}$ C) Up To +400 $^{\circ}$ F (+204 $^{\circ}$ C)

Available Temperature Rating with Optional Seals:

— From -70° F (-56° C) Up To +950° F (+510°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

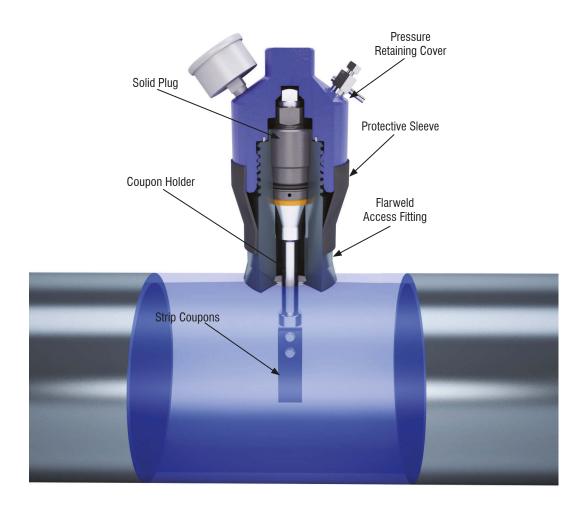
Available with ACME Threaded and Severe Service Internal Configurations

Optional NPT, Flanged, Socketweld, and Buttweld Tee Connection



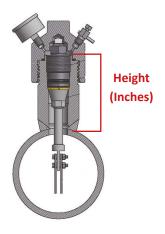
Access Fitting General Assembly

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

Dody Style	Weight	Height		
Body Style	lbs.	Inches		
(Non-Tee)	6.5	5.25		
1/4" Tee	6.5	5.25		
1/2" Tee	7.0	6.25		
3/4" Tee	7.0	6.25		
1" Tee	7.75	7.25		



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 $\frac{1}{4}$ ", $\frac{1}{4}$ ", or 1" NPT threaded outlet on the side of the fitting body, with optional Socketweld, Buttweld, 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.

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 courser 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.

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.



Optional ANSI RF Side Tee Shown



Access Fitting with internal Acme threads



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 mointoring 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

Ordering Information

el High Pı	essure	Access Fittin	g Asseml	bly							
Flarwe	d Moun	ting									
		ting – Acme									
	_					Ilt Cosasco Factory for Side-Tee options)					
Code	_		1	e for plug type from							
		1st Digit)	Alloy M	lat'l (2nd Digit)	_	Seal (3rd Digit)					
	0	Not Req.	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 950°F (-45 to 510°C) ***					
			6	Inconel 625	5	Hydrin O-Ring Teflon Primary Packing - * -40 to 275°F (-40 to 135°C)					
XXX			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)					
					Α	HNBR EOL 101 O-Ring Teflon Primary Packing - * -13 to 320° F (-25 to 160° C)					
					В	HNBR EOL 985 O-Ring Teflon Primary Packing - * -67 to 302° F (-55 to 150° C)					
					С	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 S	ize - NPT	(Standard)							
	1 2 3 4	1/4" Tee (1/2" Tee 3/4" Tee 1" Tee	Not avail	able for Flanged (FL)	Side Tee)						
		Code	Option	al Side Tee Configur	ation						
		SW	Sockety	veld Tee							
		FL71	150# RI	1							
	FL72 300# RF FL73 4/600# RF FL74 9/1500# RF										
		FL75	2500# I	, ,	e Tee conf	figurations available for ½", ¼", & 1" sizes only.					
		FL40	150# R.								
	FL41 300# RJ FL42 4/600# RJ										
		FL43	9/1500	I							
		FL44	2500# 1	-							
		BW40 BW80		le 40 (Standard) But le 80 (Extra Strong)							
		BW160		le 160 (Not applicab							
		BWXX	Schedu	le XX (Double Extra	Strong) (N	lot applicable for ¼") Buttweld Tee					
			Code	Pipeline Size							
			02	2"							
			03 04	3" 4"							
			06	6"							
			10	8-10"							
			18 36	12-18" 20-36"							
			FL	Flat							
				Code	Body IV						
				K03504	ASTM A	A105 Carbon Steel					
				K03011 ASTM A350 LF2 Carbon Steel							
				S31600 S31803	AISI 316 Stainless Steel Duplex Stainless Steel (Nitronic 60 Plug Recommended)						
				331003	Cod						
					10 11 12	Pressure Retaining Cover with Bleed Plug, Pressure Gauge and ½" NPT Center Hole for Standard P Adapter P/N 740093 2500 PSI max (when used w/probe adapter.)					
					12	Adapter P/N 740095 (Must use high pressure probe adapter)10,000 PSI max.					
↓	↓	↓	↓	. ↓							
	▼		— 02	— коз504	<u> </u>						

^{*} Nominal Temperature Range

^{**}Optional materials, seals, and pressure gauges are available. See ordering information on next page for details.
***Not retrievable at temporatures above 450°F (232°C)

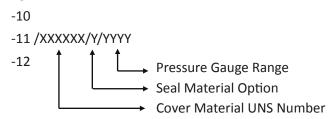
Pressure Retaining Covers

Material, Seal, and Pressure Gauge Ordering Options for Pressure Retaining Covers

Mod	del	Pressure F	ressure Retaining Cover										
7400	090	Pressure F	Retaining Cov	er With Bleed	l Plug, Pressure Gauge								
7400	093	Pressure Retaining Cover With Bleed Plug, Pressure Gauge and 1/2" NPT Center Hole for Standard Probe Adapter											
7400)95	Pressure Retaining Cover With Bleed Plug, Pressure Gauge and Center Hole for High Pressure Probe Adapter											
		Code Body Material											
		XXXXXX	Enter UNS	Number									
			Code	Seal Mater	ial Option								
			1	Viton									
			2	Ethylene Pr	opylene								
			3	Kalrez									
			5	Epchlorohy	drin								
			6	Nitrile									
			8	EDR Viton									
			Α	HNBR EOL	101 O-Ring Teflon Primary Packing - * -13 to 320°F (-25 to 160°C)								
			В	HNBR EOL	985 O-Ring Teflon Primary Packing - * -67 to 302°F (-55 to 150°C)								
			С	AFLAS 36/9	0 O-Ring Teflon Primary Packing - * 32 to 392°F (0 to 200°C)								
				Code	Pressure Gauge Range								
				YYYY	Enter Pressure (psi) (omit for standard 6000 psi gauge on 740090 and 740095 covers or 3000 psi gauge on 740093 cover)								
₩	,	₩	\	+									
7400	90 –	- S31600	— 1 -	— 4000	← Example								

Ordering options as part of an access fitting assembly

Pressure Retaining Covers:



Protective Sleeves

Tapered Rubber Sleeve (for Model 50-54 Access Fittings) - PN 740132 Straight Sleeve (for Model 56-58 Access Fittings) - PN 740133

Service Kits

	Coupon	Location	Probe l	Location	Injection	Location	Bio-Prob	Location
Replacement Part	Stage 1	Stage 2	Stage 1	Stage 2	Stage 1	Stage 2	Stage 1	Stage 2
Solid/Hollow Plug		•		•		•		•
Primary Packing	•	•	•	•	•	•	•	•
Plug O-ring	•	•			•	•	•	•
PRC O-ring	•	•	•	•	•	•	•	•
Set Screw(s)	•	•	•	•	•	•	•	•
Coupons	•	•						
Coupons & Coupon Mounting Kit		•						
Probe Packing			•	•				
Electrodes (LPR Probe only)			•	•				
Injection Nut Seal Kit					•	•		
Bio-Probe Stud							•	•
Cap Screw								•

Service Kit Ordering Information

Model												
740138	Access	Fitting	Service	Kit								
	Code	Maint	enance	Level*								
	1	Stage	1									
	2	Stage	2									
		Code	Туре	of Moni	itoring Loca	tion						
		CPN	Coupo		(55)							
		ERP LPR		Electrical Resistance (ER) Probe Linear Polarization Resistance (LPR) Probe								
		INJ		Chemical Injection								
		BIO	Bio-pr	,								
			Code	Plug A	Plug Assembly – Enter code for plug type from options below							
				Type (1st Digit)	Alloy	Mat'l (2nd Digit)	Pack	ing Seal (3rd Digit)			
				0	Not Req.	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)		
			ххх			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 121°C)	(-56 to		
								8	EDR Viton O-Ring Teflon Primary Packing - ** -15 to 400° F (-26 to 20	04°C)		
								9	Kalrez O-Ring Teflon Primary Packing - ** -15 to 450° F (-26 to 232°C	<u>)</u>		
								Α	HNBR EOL 101 O-Ring Teflon Primary Packing - ** -13 to 320° F (-25	to 160° C)		
								В	HNBR EOL 985 O-Ring Teflon Primary Packing - ** -67 to 302° F (-55	to 150° C)		
								С	AFLAS 69/90 O-Ring Teflon Primary Packing ** 32 to 392° F (0 to 200	0° C)		
								D	Viton "B" (VB185-70) Teflon Primary Packing ** 15 to 400° F (-26 to	204°C)		
				Code	Seal Mate	rial Op	tion for Pressure R	Retain	ing Cover			
				1 2 3 5 6	Viton Ethylene F Kalrez Epchloroh Nitrile	ydrin	ne					
				8	EDR Viton		Ping Toflon Primar	n Dac	king - * -13 to 320°F (-25 to 160°C)			
				A B			•	•	king - * -13 to 320 F (-25 to 160 C)			
				С			•	•	ng - * 32 to 392°F (0 to 200°C)			
					Code		on Type (see table 0 for ER Probes ar		ext page for coupon options-for LPR and Bio-Probes enter Element <i>F</i> emical Injection)	Alloy Code,		
					XXXXXX LPR Electrodes-Enter Element Alloy code							
					XXXXXX	·						
\rightarrow	V	₩	₩	₩	\							
40138	- 1 -	- CPN -	— 111	- 1	— cı –	- S3	— G10180 —	- 0	— 0 — 0 — 1 — Exa	ample		
40138	- 1 -	ERP -	- 211	<u>- 1 - </u>	— 0 ◀				Ex	ample		
40138	- 1 -	- LPR -	- 211	- 1-	- козоо5	•			Ex	ample		
40138	<u> </u>	- INJ -	- 111	<u> </u>	— 0 ◀	_			Ех	kample		
	1 _	– PIO –	_ 111	_ 1 _	– козоо5	-			F ₁	xample		

^{*} 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

Coupon Options

Model													
CI	Insulated	Coupon Ass	Coupon Assembly										
	Code	Coupon Ty	oupon Type										
	S3	3" Strip Co	Coupon (2 coupons included)										
	S6	6" Strip Co	upon (2 co	oon (2 coupons included)									
	L			Coupon (6 coupons included)									
	D			upon (1 coupon included)									
	MD			Coupon (3 coupons included)									
	SC		· ·	(2 coupons	included)								
		Code	Alloy										
		G10180	1018 Mild										
		S30300	303 Stain										
		S30400	304 Stain										
		S30403 S31600	304L Stain	nless Steel									
		S31600 S31603		nless Steel									
		S321003	321 Stain										
		S41000	410 Stain										
		\$43000	430 Stain										
			Code	Surface Fi	nish								
			0	Ground									
			1	Directiona	al Sanded								
			2	Glass Bea	d Blast								
				Code	Insulator	's							
				0	Standard	Nylon Insu	ılators (250°F)						
				1	High Tem	perature C	eramic Insulators (1475°F)						
				2		nsulators (5	·						
				3	No Insula	ators - Onl	y option for disc coupons						
					Code	Handling							
					0	Pre-weigh	ned						
			1 Un-weighed										
			Code Special Options										
						0	No Special Option						
						1	Stamp Serial Number on Both Sides						
₩	\	\	₩	\	\	\							
CI -	— S3 -	— G10180	— o	<u> </u>	<u> </u>	— 1	4	Example					

Cosasco

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