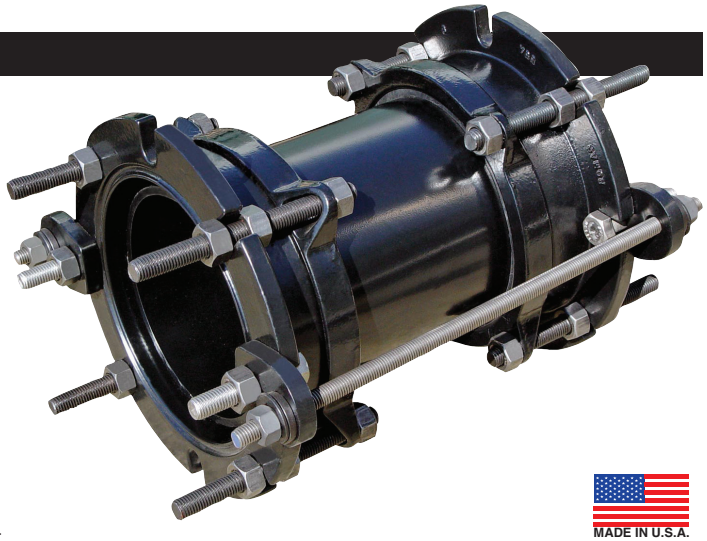
STYLE ECF400
EQUIPMENT CONNECTION FITTING

ROMAC INDUSTRIES, INC.

MATERIAL SPECIFICATIONS



PIPE: ASTM A53 SCH 40 pipe for 3"–12" sizes and ASTM A36 steel for 14" & larger sizes. A pipe stop is available.

FLANGE BODIES AND END RINGS: For 3"–12" sizes, body and end ring are ASTM A536 ductile (nodular) iron meeting or exceeding Grade 65-45-12. For 14"- 72" ASTM A36 Carbon Steel with AWWA C207 Class D flanges. 3"–72" meet the dimensional requirments of ANSI Class 125 and 150 bolt circles. For 3"–12" flanges see page 10-6 for optional filler flange.

GASKETS: Compounded for water and sewer service in accordance with ASTM D2000 (ductile iron flange bodies, 3"–12" have flange o-ring gaskets). Other compounds available for petroleum, chemical or high temperature services.

MADE IN U.S.A.

NSF61 certified.

MEETS AWWA C219

BOLTS, NUTS, SPHERICAL WASHERS: High Strength Low Alloy Steel. Type 304 Stainless Steel or Type 316 Stainless Steel is available.

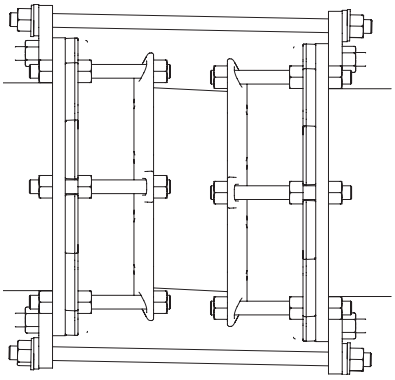
TIE RODS: High Strength Steel per ASTM A193 B7. Type 304 (A193 B8) and 316 (A193 B8M) Stainless steel is available.

HARNESS LUGS: ASTM A36 steel. Coated with Fusion Bonded Epoxy.

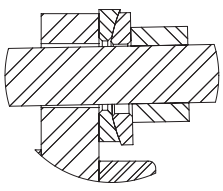
COATING: All steel and ductile iron parts are coated at Romac with Romacoat fusion bonded epoxy, NSF 61 certified.

FLANGED COUPLING

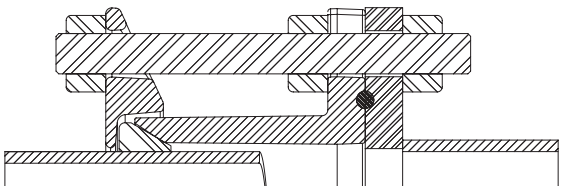
RESTRAINT FOR MISALIGNED FLANGED FITTINGS ON FIELD CONNECTIONS AND EQUIPMENT



- The ECF400 combines two flanged couplings with a plain spool piece and thrust restraint rods in one complete and easy-to-use assembly.
- The ECF400's flexibility and adjustability simplifies systems that are otherwise difficult to work with.
- Provided in standard lengths for ease of piping system design. Available in custom lengths if required.
- Spherical washer and harness lug assemblies are engineered to keep the tie-rods in position, and prevent bending.



SPHERICAL WASHER DETAIL



BOLTING DETAIL

OFFSET & DEFLECTION
If your system has misaligned or offset flanges that need to be connected, the ECF400 will accommodate a minimum of 1/4" offset and 2° deflection. Once installed, the fitting is a solid connection that will not allow your system to move.

ADJUSTABLE LAYING LENGTH
Just like our DJ400 and DJ405, the ECF400 has an adjustable laying length, allowing room for access, valve installation, or an extra pipe length that may be required.

CONNECTION
The Romac Equipment Connection Fitting accommodates a flanged system with ANSI CLS 125 and 150 bolt circles. We also can provide other configurations on request.

RESTRAINT
Tie-rods and harness lugs provide the means of restraint. Since the tie-rods only pass through the harness lugs and not the flanges, the rods are easily installed or removed.

For sizes, pricing and other information, see page 4-13.

Manufactured with Domestic and Import material. For Domestic requirements please contact our Quotations Department.

JANUARY 10, 2022 • UPDATED OCTOBER 23, 2025

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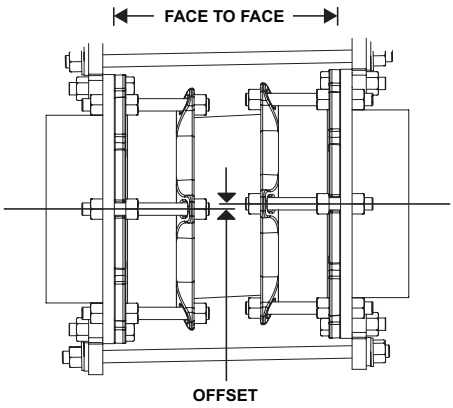
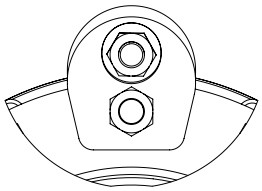
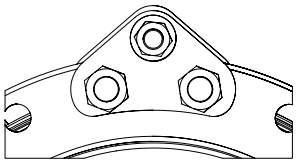




HARNESS LUG DETAIL
3"- 12"



HARNESS LUG DETAIL
14"- 72"

⚠ No Cancel, No Return Item.

NOM. PIPE SIZE	HARNESS LUG THICKNESS	ALLOWABLE OFFSET AT MIN. LENGTH	ALLOWABLE OFFSET AT MAX. LENGTH
3"	0.50	0.25	0.32
4"	0.50	0.25	0.32
6"	0.75	0.25	0.32
8"	0.75	0.25	0.32
10"	1.00	0.32	0.39
12"	1.00	0.33	0.40
14"	1.00	0.25	0.37
16"	1.00	0.25	0.36
18"	1.00	0.25	0.35
20"	1.00	0.25	0.35
24"	1.00	0.25	0.35
30"	1.25	0.25	0.34
36"	1.25	0.25	0.34
42"	1.25	0.25	0.33
48"	1.75	0.25	0.32
54"	1.75	0.25	0.32
60"	1.75	0.25	0.32
66"	2.00	0.25	0.30
72"	2.00	0.25	0.30

NOM. PIPE SIZE	LENGTH FACE-TO-FACE NOM.	MIN.	MAX.	CATALOG NUMBER	LIST PRICE w/STD B&N	w/304 SS B&N	w/316 SS B&N	BOLTS[1] QTY: SIZE	TIE-RODS SIZE	LENGTH	QTY	SPOOL O.D.	THK	APPROX. WEIGHT (lbs.)
3"	16.50	15.50	17.50	ECF400-03	$2,178.30	$2,388.68	$2,633.61	4: ⅝ - 11	⅝	23.38	2	3.50	0.22	49
4"	16.50	15.50	17.50	ECF400-04	2,238.83	2,449.86	2,709.99	8: ⅝ - 11	⅝	23.75	2	4.50	0.24	58
6"	16.63	15.63	17.63	ECF400-06	2,662.37	3,062.35	3,307.39	8: ¾ - 10	⅝	24.88	2	6.63	0.28	92
8"	16.63	15.63	17.63	ECF400-08	3,267.50	3,674.82	3,919.81	8: ¾ - 10	⅝	25.25	2	8.63	0.32	122
10"	19.25	18.25	20.25	ECF400-10	4,659.20	5,267.23	5,512.25	12:⅝-11 x ⅞-9	¾	28.75	2	10.75	0.37	204
12"	19.50	18.50	20.50	ECF400-12	5,990.42	6,614.68	6,859.70	12: ⅞ - 9	⅞	29.63	2	12.75	0.38	268
14"	23.75	22.25	25.25	ECF400-14	8,189.02	9,186.42	10,136.69	16: ⅝ - 11	1	35.00	2	14.00	0.25	274
16"	24.75	23.25	26.25	ECF400-16	9,681.54	11,206.28	12,593.78	20: ⅝ - 11	1	36.25	2	16.00	0.25	322
18"	24.75	23.25	26.25	ECF400-18	10,181.09	12,608.95	14,497.97	20: ⅝ - 11	1	36.50	3	18.00	0.25	367
20"	24.88	23.38	26.38	ECF400-20	11,486.29	14,578.44	17,279.09	24: ⅝ - 11	1	37.13	4	20.00	0.25	438
24"	25.13	23.63	26.63	ECF400-24	14,529.02	19,240.32	22,930.73	28: ⅝ - 11	1	37.88	5	24.00	0.25	576
30"	26.38	24.88	27.88	ECF400-30	POA			32: ⅝ - 11	1¼	40.63	5	30.00	0.38	908
36"	26.88	25.38	28.38	ECF400-36				36: ⅝ - 11	1¼	41.63	7	36.00	0.38	1,272
42"	28.63	27.13	30.13	ECF400-42				40: ⅝ - 11	1¼	43.88	9	42.00	0.38	1,673
48"	30.75	29.25	32.25	ECF400-48				44: ⅝ - 11	1½	47.75	8	48.00	0.38	2,098
54"	31.25	29.75	32.75	ECF400-54				48: ⅝ - 11	1½	49.13	10	54.00	0.38	2,670
60"	31.50	30.00	33.00	ECF400-60				56: ⅝ - 11	1½	49.63	13	60.00	0.38	3,245
66"	34.88	33.38	36.38	ECF400-66				60: ⅝ - 11	1¾	54.75	11	66.00	0.38	4,052
72"	35.13	33.63	36.63	ECF400-72				64: ⅝ - 11	1¾	55.25	13	72.00	0.38	4,659

[1] 3"–12" Use Through-Bolts

Nominal Sizes	Working Pressure
3"– 6"	275 psi
8"– 12"	175 psi *
14"– 72"	150 psi **

* For 275 psi, more rods are required. Contact Romac Quotations Department.

** Other flange types and higher pressures can be accommodated; contact your Romac representative.

TO ORDER: Specify catalog number.
EXAMPLE: For a 12" ECF400 Order: **ECF400-12**