

With the Ashcroft® Isolation Ring, the instrument is in contact with the fill fluid, not directly with the process flow. Clogging or fouling is never a problem. The Iso-Ring has a flexible inner cylinder, behind which is the fill fluid. As process liquid flows through the pipe, it exerts pressure. The pressure exerted by the fill fluid is then monitored by the instrument-sensing element. A 360-degree flexible cylinder means no plugging, assuring reliable and accurate pressure readings. A built-in threaded needle valve is provided as standard. This permits the removal of a pressure instrument for calibration, repair, or replacement without shutting down the process flow.

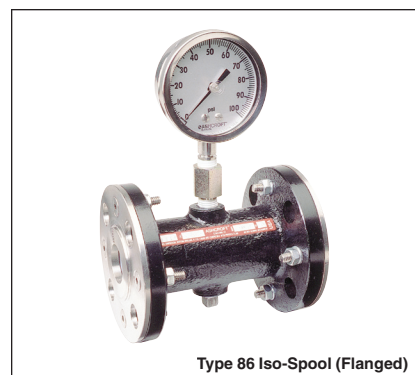
Adaptable to a variety of process conditions and applications, the

Ashcroft Iso-Ring can be used for protection of instrumentation such as pressure gauges, switches, transmitters, recorders and transducers. The Iso-Ring fits between customer-supplied piping flanges like many butterfly valves, and is available for piping diameters from 2" to 20". It can be used at any pressure within the limitations of ASME classes 150 and 300, and even in most vacuum applications.

Ashcroft® Type 85 and 86 Iso-Spools are used for small-diameter piping. Designed to provide a large sensing area in the smaller pipe diameters from 1" to 2", the patented Iso-Spool is offered in either NPT threaded or flanged models. Type 86 is available with flat or raised-face flanges.



Type 80 Iso-Ring (Wafer)  
Type 81 Iso-Ring (Bolt Thru)



Type 86 Iso-Spool (Flanged)



Type 85 Iso-Spool (Threaded)

## SELECTION TABLES

**Table A – Pipe Size/Type Number**

Size Code	Pipe Size/Code—Inches																Type Number	Housing Material
	1 01	1½ 15	2 02	3 03	4 04	5 05	6 06	8 08	10 10	12 12	14 14	16 16	18 18	20 20				
	•	•	•	•	•	•	•	•	•	•	•	•	•	•			80	Carbon Steel
	•	•	•	•	•	•	•	•	•	•	•	•	•	•			85 <sup>(1)</sup>	
	•	•	•	•	•	•	•	•	•	•	•	•	•	•			86 <sup>(2)</sup>	
			•	•	•	•	•	•	•	•	•	•	•	•			81	

**Table B  
Inner Flexible Wall<sup>(3)</sup>**

Material	Code	Temp. Limits
Buna N	E	up to 225°F (107°)
Teflon <sup>(4)</sup>	T	up to 350°F (177°)
Silicone <sup>(4)</sup>	SI	up to 450°F (232°)
Viton	Y	up to 350°F (177°)
White Neoprene	CR	up to 225°F (107°)
Natural Rubber	NR	up to 225°F (107°)

**Table C  
Assembly Flanges**

Material	Code
Carbon steel	B
316 stainless steel	S
Chlorinated Polyvinyl Chloride	CP
Teflon Enveloped	CT
Polypropylene	PP

**Table D  
Instrument Connection**

Size – NPT	Code
¼	02T
½	04T

### NOTES:

- (1) Female threaded ends.
- (2) Flanged ends.
- (3) Not available in sizes 12" or larger.
- (4) Iso-Spool only.
- (5) Temperature limits of both wall and fill fluid must not be exceeded.

**Table E – Filling Fluid**

Filling	Service	Connection to Instrument	Temperature Range °F	Code
Glycerin	Pressure	Direct Only	0/400	CG
Silicone	Pressure/Vacuum	Direct or Flexible Line	–40/600	CK
Halocarbon	Pressure/Vacuum in presence of strong oxidizing agent	Direct or Flexible Line	–70/300	CF
Syltherm	Pressure/Vacuum	Direct or Flexible Line	–40/750	HA

## TO ORDER THIS ISO-RING/ISO-SPOOL:

1. From **Table A**...select TYPE NUMBER based on Type number and pipe size (e.g., Type 80/6"–code-8006)
  2. From **Table B**...select INNER FLEXIBLE WALL (e.g., Buna N–code E)
  3. From **Table C**...select ASSEMBLY FLANGE MATERIAL. (e.g., AISI 316 stainless steel–code S)
  4. From **Table D**...select INSTRUMENT CONNECTION size. (e.g., ¼ NPT–code 02T)
  5. From **Table E**...select FILLING FLUID, if Iso-Ring/Spool will be attached to instrument. (e.g., Glycerin–code CG)
- Coded order:** 8006-ES-02T-CG

Consult factory for guidance in product selection  
Phone (203) 385-0217, Fax (203) 385-0602 or  
visit our web site at [www.ashcroft.com](http://www.ashcroft.com)