

The isolation ring has a flexible inner cylinder. A 360-degree flexible cylinder means no clogging, assuring reliable and accurate pressure readings. A built-in threaded needle valve is standard. This permits the removal of a pressure instrument for calibration, repair, or replacement without shutting down the process flow. The needle valve also allows for throttling of the process when excessive pulsation is present.

Adaptable to a variety of process conditions and applications, the Ashcroft isolation ring can be used for protection of instrumentation such as

pressure gauges, switches, transmitters, recorders and transducers. The isolation 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.


**SELECTION TABLES**
**Table 1 – Pipe Size/Type Number**

Size Code	Pipe Size/Code—Inches														Type Number	Housing Material
	1	1½	2	3	4	6	8	10	12	14	16	18	20			
	01	15	02	03	04	06	08	10	12	14	16	18	20	80	Carbon Steel	
			•	•	•	•	•	•	•	•	•	•	•	81		

**Table 2  
Inner Flexible Wall<sup>(2)</sup>**

Material	Code	Temp. Limits
Buna N	E	up to 225°F (107°)
Teflon <sup>(1)</sup>	T	up to 350°F (177°)
Silicone	SI	up to 450°F (232°)
Viton	Y	up to 350°F (177°)
Natural Rubber	NR	up to 225°F (107°)

**Table 3  
Assembly Flanges**

Material	Code
Carbon steel	B
316 stainless steel	S
Chlorinated Polyvinyl Chloride	CP

**Table 4 –  
Instrument Connection**

Instrument Connection	Size	Code
Threaded – female NPT	¼	02T
Threaded – female NPT	½	04T

**Table 5 – Filling Fluid**

Filling	Service	Connection to Instrument	Temperature Limits Range °F	Code
Glycerin	Pressure	Direct Only	0/400	CG
Silicone	Pressure/Vacuum	Direct or Remote Line	-40/600	CK
Halocarbon	Pressure/Vacuum in presence of strong oxidizing agent	Direct or Remote Line	-80/392	CF
Syltherm	Pressure/Vacuum	Direct or Remote Line	-40/750	HA
Food Grade Silicone	Pressure/Vacuum	Direct or Remote Line	-40/500	CZ
Distilled Water	Pressure/Vacuum	Direct or Remote Line	40/185	FJ
Ethylene Glycol & Water	Pressure/Vacuum	Direct or Remote Line	20/-325	CT
Propylene Glycol	Pressure/Vacuum	Direct or Remote Line	20/325	CV
Mineral Oil	Pressure/Vacuum	Direct or Remote Line	10/400	HY
Silicone 10 CST	Pressure/Vacuum	Direct or Remote Line	-40/500	DJ

**NOTES:**

- (1) Not available in sizes 12" or larger.
- (2) Temperature limits of both inner flexible wall and fill fluid must not be exceeded.

**TO ORDER THIS ISOLATION RING TYPE 80/81 SERIES:**

- 80 - 02 - E B - 02T - X CG - \_\_\_\_\_
1. Isolation Ring Type \_\_\_\_\_  
Process Connection \_\_\_\_\_
  2. Flexible Inner Wall Material \_\_\_\_\_
  3. Assembly Flange Material \_\_\_\_\_
  4. Instrument Connection \_\_\_\_\_
  5. Fill Fluid (when attached to instrument) \_\_\_\_\_
  6. Optional Features (see page 168-169) \_\_\_\_\_

The isolation spool has a flexible inner cylinder. A 360-degree flexible cylinder means no clogging, assuring reliable and accurate pressure readings. A built-in threaded needle valve is provided standard. This permits the removal of a pressure instrument for calibration, repair, or replacement without shutting down the process flow. The needle valve also allows for throttling of the process when excessive pulsation is present.

Adaptable to a variety of process conditions and applications, the Ashcroft isolation spool can be used

for protection of instrumentation such as pressure gauges, switches, transmitters and transducers. The isolation spool fits between customer-supplied piping flanges like many butterfly valves, and is available for piping diameters 1", 1½" and 2". It can be used at any pressure within the limitations of ASME classes 150 and 300, and in most vacuum applications.



**SELECTION TABLES**

**Table 1 – Pipe Size/Type Number**

Size	Pipe Size/Code—Inches			Type Number	Housing Material
	1	1½	2		
Code	01	15	02	85 <sup>(1)</sup>	Carbon Steel
	•	•	•	86 <sup>(2)</sup>	

**Table 2 – Inner Flexible Wall<sup>(3)</sup>**

Material	Code	Temp. Limits
Buna N	E	up to 225°F (107°)
Teflon	T	up to 350°F (177°)
Viton	Y	up to 350°F (177°)
Natural Rubber	NR	up to 225°F (107°)

**Table 3  
Assembly Flanges**

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

**Table 4  
Instrument Connection**

Size – NPT	Code
¼	02T
½	04T

**Table 7 – Flange Class Available  
(Type 86 only)**

**Table 8 – Flange Types  
(for Type 86 Only)**

Type	Code	
Raised Face	RF	Standard
Ring Joint	RJ	Optional

**Table 5 – Filling Fluid**

Filling	Service	Connection to Instrument	Temperature Limits Range °F	Code
Glycerin	Pressure	Direct Only	0/400	CG
Silicone	Pressure/Vacuum	Direct or Remote Line	-40/600	CK
Halocarbon	Pressure/Vacuum in presence of strong oxidizing agent	Direct or Remote Line	-80/392	CF
Syltherm	Pressure/Vacuum	Direct or Remote Line	-40/750	HA
Food Grade Silicone	Pressure/Vacuum	Direct or Remote Line	-40/500	CZ
Distilled Water	Pressure/Vacuum	Direct or Remote Line	40/185	FJ
Ethylene Glycol & Water	Pressure/Vacuum	Direct or Remote Line	20/-325	CT
Propylene Glycol	Pressure/Vacuum	Direct or Remote Line	20/325	CV
Mineral Oil	Pressure/Vacuum	Direct or Remote Line	10/400	HJ
Silicone 10 CST	Pressure/Vacuum	Direct or Remote Line	-40/500	DJ

**NOTES:**

- (1) Female threaded ends.
- (2) Flanged ends.
- (3) Temperature limits of both inner flexible wall and fill fluid must not be exceeded.

**TO ORDER THIS ISOLATION SPOOL TYPE 85 SERIES:**

85 - 01 - E B - 02T - X CG - \_\_\_\_\_

- Isolation Spool Type \_\_\_\_\_
- Process Connection Size \_\_\_\_\_
- Flexible Inner Wall Material \_\_\_\_\_
- Assembly Flange Material \_\_\_\_\_
- Instrument Connection \_\_\_\_\_
- Fill Fluid (when attached to instrument) \_\_\_\_\_
- Optional Features (see page 168-169) \_\_\_\_\_

**TO ORDER THIS ISOLATION SPOOL TYPE 86 FLANGE:**

86 - 01 - E B - 02T - X CG - \_\_\_\_\_ -150 RF

- Isolation Spool Type \_\_\_\_\_
- Process Connection Size \_\_\_\_\_
- Flexible Inner Wall Material \_\_\_\_\_
- Assembly Flange Material \_\_\_\_\_
- Instrument Connection \_\_\_\_\_
- Fill Fluid (when attached to instrument) \_\_\_\_\_
- Optional Features \_\_\_\_\_
- Flange Class \_\_\_\_\_
- Flange Type \_\_\_\_\_