

# Flow-Through Annular Style

## TYPE 40



- Process liquid flowing through the pipe exerts pressure onto a flush-mounted flexible inner cylinder containing clean, captive liquid; completely isolating instrumentation from the process flow and preventing plugging
- Can be used for remote mounting of pressure instrument(s) with capillary
- Instrumentation can be removed for calibration, repair or replacement without interrupting the process flow
- Integral design prevents accidental breakage
- Can be used with a variety of process conditions in many applications
- Eliminates clogging typically associated with diaphragm seals used in viscous fluid applications which can lead to inaccurate pressure readings
- Assembly flanges ASME B16.1 Class 150, 2" to 20"

### APPLICATIONS

- Slurries
- Heavy sludges
- Chemical - synthetic polymers
- Diffusers - flow measurement
- Abrasive media

### SPECIFICATIONS

Seal type	Inline flanged with sleeve diaphragm			
Instruments	Type	Size	Minimum Pressure	Maximum Pressure
	Gauges	2-1/2" to 6"	0 psig to 30 psig	0 psig to 285 psig
	Transducers	-	0 psig to 30 psig	0 psig to 285 psig
	Switches	-	0 psig to 30 psig	0 psig to 285 psig
Upper housing	Type	Non-continuous duty		
	Connections	1/4" NPT, 1/2" NPT		
	Materials	Polyurethane enamel coated Steel, 316 Stainless Steel		
Diaphragm	Size	Sleeve style per ring size		
	Materials	NBR, FKM, EPDM, PTFE (Other materials available on request)		
Flange Materials	Connections	Flanged, Class 150, 2" through 20"		
	Materials	Polyurethane enamel coated Steel, 316 Stainless Steel		
Bolting	Zinc-plated Steel, optional Stainless Steel			
Operating temperature	-30 °F to 140 °F, based on materials of construction and fill fluid			

For NOSHOK Diaphragm Seals with Carbon Steel lower housing materials:



**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

For NOSHOK Diaphragm Seals with Stainless Steel lower housing materials:



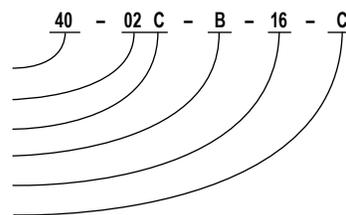
**WARNING:** This product can expose you to chemicals including Chromium (VI) and Nickel, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

ORDERING INFORMATION				
<b>TYPE</b>	<b>40</b> Annular Ring	<b>40BT</b> Bolt-Through Annular Ring		
<b>INSTRUMENT CONNECTION SIZES</b>	<b>02</b> 1/4" NPT	<b>04</b> 1/2" NPT		
<b>HOUSING MATERIALS</b>	<b>C</b> Carbon Steel	<b>S</b> 316 Stainless Steel		
<b>DIAPHRAGM MATERIALS</b>	<b>B</b> NBR	<b>V</b> FKM	<b>T</b> PTFE	<b>E</b> EPDM
<b>PIPE SIZES</b>	<b>16</b> 2" Pipe	<b>40</b> 5" Pipe	<b>80</b> 10" Pipe	<b>128</b> 16" Pipe
	<b>24</b> 3" Pipe	<b>48</b> 6" Pipe	<b>96</b> 12" Pipe	<b>144</b> 18" Pipe
	<b>32</b> 4" Pipe	<b>64</b> 8" Pipe	<b>112</b> 14" Pipe	<b>160</b> 20" Pipe
<b>FLANGE MATERIALS</b>	<b>C</b> Carbon Steel	<b>S</b> 316 Stainless Steel		

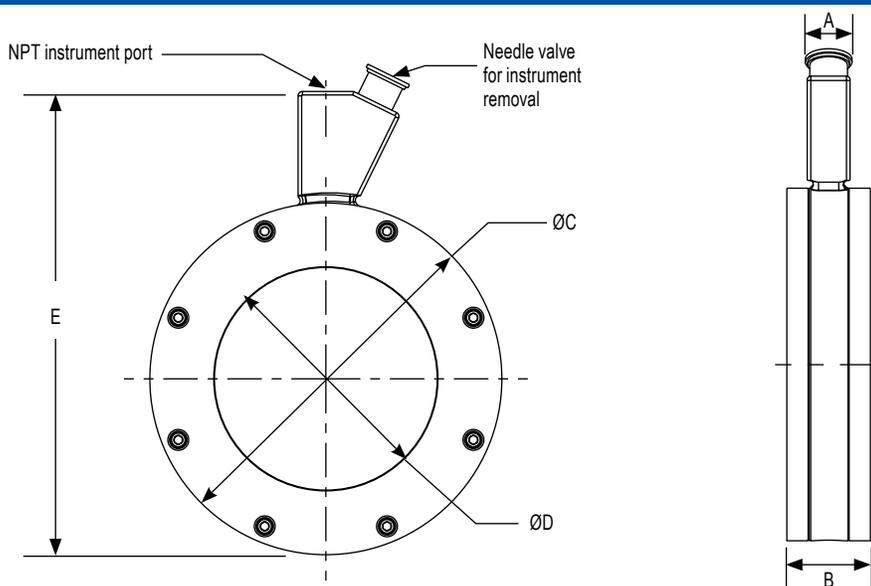
Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

**EXAMPLE**

Type .....40  
 Instrument connection size .....1/4" NPT  
 Housing material .....Carbon Steel  
 Diaphragm material ..... NBR  
 Pipe size .....2" pipe  
 Flange material .....Carbon Steel



**Type 40**



NOMINAL PIPE SIZE											
	2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"
<b>A</b>	0.76" (19 mm)	0.76" (19 mm)	0.76" (19 mm)	0.76" (19 mm)	0.76" (19 mm)	0.76" (19 mm)	0.76" (19 mm)	0.76" (19 mm)	0.76" (19 mm)	0.76" (19 mm)	0.76" (19 mm)
<b>B</b>	2" (51 mm)	2" (51 mm)	1-1/2" (38 mm)	1-1/2" (38 mm)	1-1/2" (38 mm)	1-1/2" (38 mm)	1-1/2" (38 mm)	1-3/4" (45 mm)	1-3/4" (45 mm)	1-3/4" (45 mm)	1-3/4" (45 mm)
<b>C</b>	4-7/32" (107 mm)	5-15/32" (139 mm)	6-9/32" (160 mm)	7-9/16" (192 mm)	8-7/16" (214 mm)	10-5/8" (270 mm)	12-13/16" (325 mm)	14-27/32" (377 mm)	17-13/64" (437 mm)	19-7/32" (488 mm)	21-1/2" (546 mm)
<b>D</b>	2" (51 mm)	3" (76 mm)	4" (102 mm)	5" (127 mm)	6" (152 mm)	8" (203 mm)	10" (254 mm)	12" (305 mm)	14" (356 mm)	16" (406 mm)	18" (457 mm)
<b>E</b>	7.18" (182 mm)	8.44" (214 mm)	9.27" (235 mm)	10.53" (267 mm)	11.40" (289 mm)	13.60" (345 mm)	15.77" (400 mm)	17.81" (452 mm)	20.17" (512 mm)	22.18" (563 mm)	24.47" (621 mm)