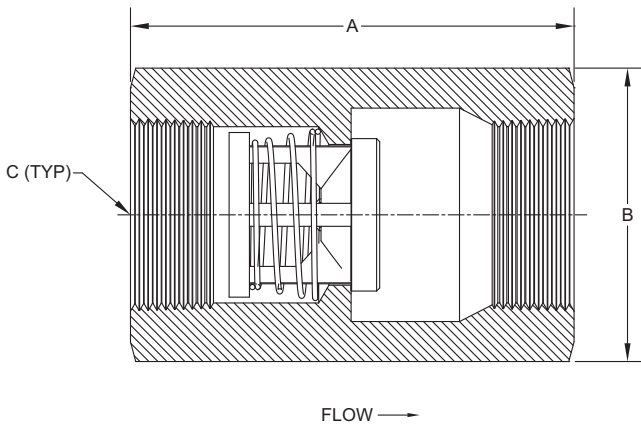


The **Universal Low Pressure (U3, UR)** check valve is a one piece body machined from bar stock and is designed for minimum pressure drop. The valve has a light-weight, compact design that provides maintenance-free, dependable service. NPT threads are per ASME B1.20.1. Also available with ISO 7 “Rp” threads. (UR). These valves can also be used as a low pressure relief valve or vacuum breaker by using the desired spring settings.

**NOTE:** Many valves in this series can be supplied with B16.34 certification. Consult the factory for more information.



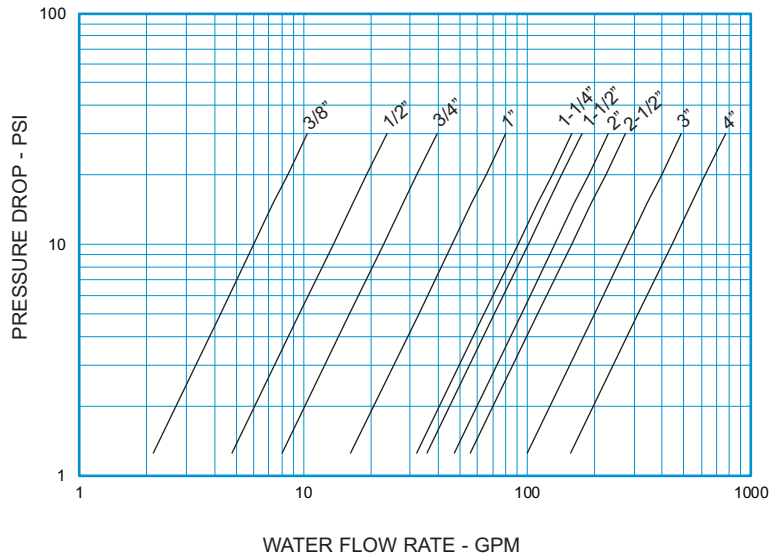
Nom. Pipe Size	Size Code	A	Hex <sup>1</sup> Size B	C	Orifice Diameter
3/8	C	2.16	13/16	3/8 NPT	0.348
1/2	D	2.71	1-1/8	1/2 NPT	0.464
3/4	F	2.95	1-1/4	3/4 NPT	0.593
1	H	3.64	1-5/8	1 NPT	0.890
1-1/4	I	3.91	2-1/4	1-1/4 NPT	1.135
1-1/2	J	4.36	2-1/2	1-1/2 NPT	1.385
2	K	5.85	3	2 NPT	1.555
2-1/2	L	5.50	3-3/4	2-1/2 NPT	1.555
3	M	6.25	4-1/2	3 NPT	2.025
4	N	7.13	5-1/2	4 NPT	2.560

<sup>1</sup> May be larger and/or round.

Body Material <sup>2</sup>	Availability	Non-Shock Pressure-Temperature Rating	
316 Stainless Steel (SS)	Standard	3/8" - 3"	4"
Carbon Steel (CS)			
Brass (BR)			
Alloy 20 (A2)	Semi-standard	3000 PSIG @ 100°F (1500 PSIG for o-ring seats)	1500 PSIG @ 100°F
Alloy C-276 (HC)			
Alloy 400 or Monel <sup>®</sup> (MO)	Contact the factory for these or other materials		
Alloy B (HB)			
Titanium (TI)			

<sup>2</sup> See page 54 for material grade information.

**Universal Low Pressure**  
For Water at 72°F



**Note:** All flow curves and Cv values presume the valves are fully open with 1/2 PSI cracking pressure springs. Consult the factory for more information.

STYLE U3 C <sub>v</sub> VALUES & VALVE WEIGHTS			
C <sub>v</sub>	SIZE	SS & CS ALLOYS	BRASS
1.9	3/8	3.0 oz.	3.3 oz.
4.3	1/2	8.5 oz.	9.1 oz.
7.2	3/4	9.6 oz.	10.1 oz.
14.6	1	1.2 lb.	1.3 lb.
28.8	1-1/4	2.9 lb.	3.2 lb.
31.9	1-1/2	3.6 lb.	3.9 lb.
42.0	2	6.5 lb.	7.2 lb.
50.0	2-1/2	9.2 lb.	10 lb.
89.0	3	14.3 lb.	15.5 lb.
140	4	21.7 lb.	23.9 lb.

See page 49 for Flow Formulae.  
Valve weights are approximate.

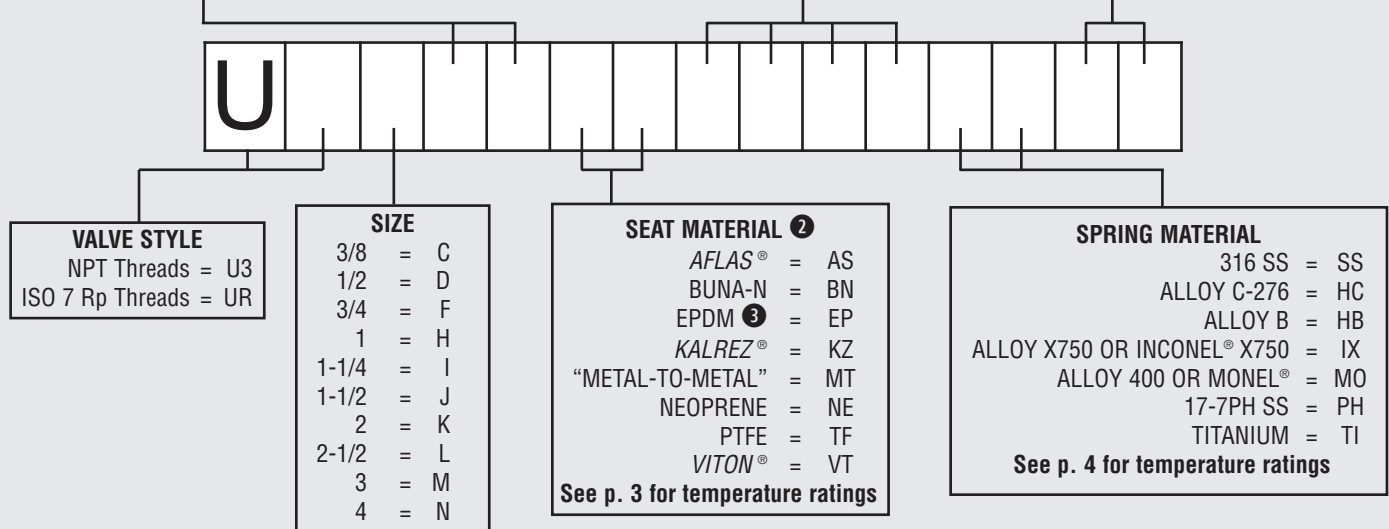
**HOW TO ORDER  
CHECK-ALL STYLE U3**

**BODY MATERIAL**  
 ALLOY 20 = A2  
 BRASS = BR  
 CARBON STEEL = CS  
 ALLOY B = HB  
 ALLOY C-276 = HC  
 ALLOY 400 OR MONEL® = MO  
 316 SS = SS  
 TITANIUM = TI  
**See p. 3 for temperature rating**

**SPRING CRACKING PRESSURES (PSI)**  
 Must use decimal as a character unless selecting NO SPRING. *Specify Exact Setting*  
**SPRING RANGES**      **EXAMPLE**  
 .000 TO .999      =      .500  
 1.00 TO 9.99      =      1.50  
 10.0 TO 85.0      =      15.0  
 NO SPRING      =      NOSPRG  
**STANDARD CRACKING PRESSURES ①**  
 .125    .500    1.50    3.50  
 (Sizes C-I Only)

**Note:** Many other cracking pressures are available. All spring tolerances +/- 15%.

**SPECIAL OPTIONS**  
 T = FEP ENCAPSULATED SPRING  
**See p. 4 for temperature rating**  
 Contact the factory for more options



Listed above are the most common material selections. Please contact the factory for additional options.

- ① .500 PSI is the only standard cracking pressure for spring materials other than Stainless Steel. .125 PSI springs are not recommended for installations with flow vertical down.
- ② Seat materials other than "metal-to-metal" have a maximum pressure rating of 1500 PSI. "Metal-to-Metal" and PTFE seats are not resilient. See page 50 for allowable leakage rates.
- ③ EP seats not recommended for use with Carbon Steel valves.