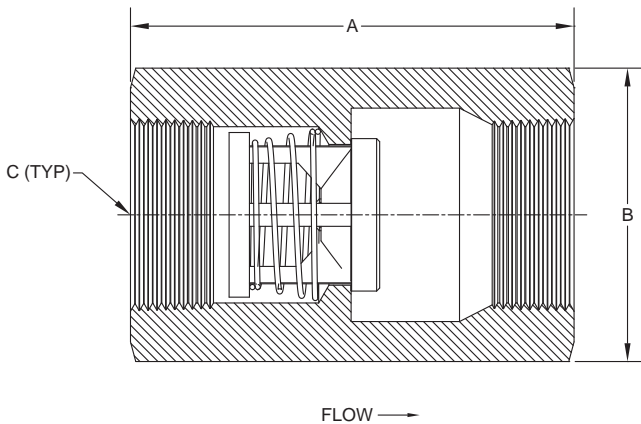


The **Universal Low Pressure (U3, UR)** check valve is a one piece body machined from bar stock and is designed for minimum pressure drop. The valve has a light-weight, compact design that provides maintenance-free, dependable service. NPT threads are per ASME B1.20.1. Also available with ISO 7 “Rp” 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 ¹ 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

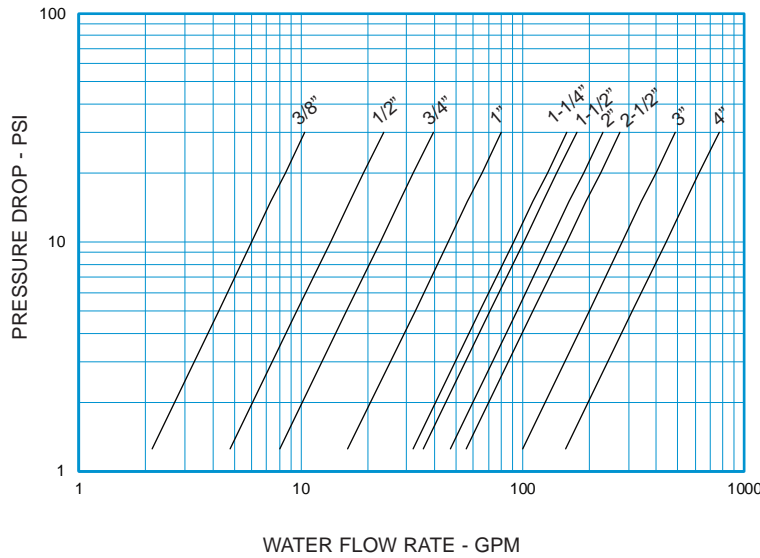
¹ May be larger and/or round.

Body Material ²	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 [®] (MO)	Contact the factory for these or other materials		
Alloy B (HB)			
Titanium (TI)			

² 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 _v VALUES & VALVE WEIGHTS			
C _v	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.
11.0	1	1.2 lb.	1.3 lb.
19.0	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.

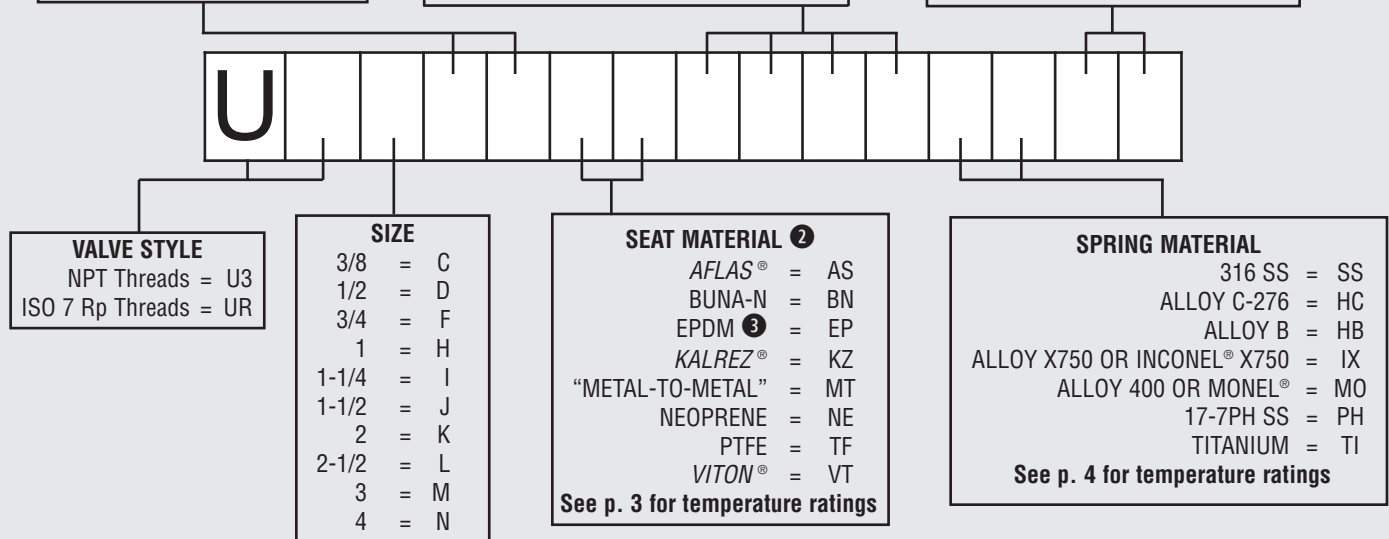
**HOW TO ORDER
CHECK-ALL STYLE U3**

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
 Replace "X" with actual desired setting.
 Must use decimal as a character.
 (PSI) FORMAT EXAMPLE
 .000 TO .999 = .XXX .500
 1.00 TO 9.99 = X.XX 1.50
 10.0 TO 99.9 = XX.X 15.0
 NO SPRING = NOSPRG 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.

Trademarks Used