

Body Material Definition for Check-All Valve Products

To determine the specific material definition, use the following procedure. This grid is the typical designation of body materials. Slight variations may occur due to raw material availability.

- 1) Note the material designation imprinted on the valve body or associated tag. The marking includes the valve style, size, and material. Some examples include:
 - a) F1: F1JSS this means the size is 1-1/2" NPS (J = 1-1/2"), the style is FIV (Flange Insert Valve), it is designed for ANSI class 150 or 300 flanges, or similar and schedule 40 or lighter pipe and the body material code is SS.
 - b) U3: U3JSS this means the style is UN-3, the size is 1-1/2" NPS (J = 1-1/2", K = 2", etc.) and the body material code is SS.
- 2) Now check the material code in the valve marking in the following material definition table to determine the ASTM (American Society of Testing and Materials) material designation. The style size and material code will be needed to define the material. In general, the material codes are as follows:

A2 - Alloy 20	HB - HASTELLOY® B Alloy	PV - PVC
BR - Brass or Bronze	HC - HASTELLOY® C Alloy	SS - 316 Stainless Steel
CS - Carbon Steel	MO - MONEL® Alloy	TF - PTFE

STYLE	SIZE RANGE	MATERIAL CODE	ASTM MATERIAL (UNS)
3S (3SC)	H - N (1" - 4")	SS	ASTM A479 Gr 316/316L (S31600/S31603)
BU (BU)	D - M (1/2" x 3/8" to 3" x 2-1/2")	A2 BR CS HB HC MO SS	ASTM B473 (N08020) ASTM B16 H02 TEMPER (C36000) ASTM A108 Gr 1215 (G12150) ASTM B335 (N10665 or N10675) ASTM B574 (N10276) ASTM B164 (N04400 or N04405) ASTM A479 Gr 316/316L (S31600/S31603)
CN (CON)	D - N (1/2" - 4")	A2 BR CS HB HC MO SS	ASTM B473 (N08020) ASTM B16 H02 TEMPER (C36000) ASTM A108 Gr 1215 (G12150) ASTM B335 (N10665 or N10675) ASTM B574 (N10276) ASTM B164 (N04400 or N04405) ASTM A479 Gr 316/316L (S31600/S31603)
F1 F6 (FIV)	D - I (1/2" - 1-1/4")	A2 CS HB HC MO SS	ASTM B473 (N08020) ASTM A108 Gr 1215 (G12150) ASTM B335 (N10665 or N10675) ASTM B574 (N10276) ASTM B164 (N04400 or N04405) ASTM A479 Gr 316/316L (S31600/S31603)
F1 (FIV)	D - J (1/2" - 1-1/2")	BR	ASTM B16 H02 TEMPER (C36000)
F1 (FIV)	J - W (1-1/2" - 20")	A2 CS HB HC MO SS	ASTM A351 Gr. CN7M (N08007) ASTM A216 Gr. WCB (J03002) ASTM A494 Gr. N7M (N30007) ASTM A494 Gr. CW12MW (N30002) ASTM A494 Gr. M-35-2 (N04020) ASTM A351 Gr. CF8M (J92900)
F1 (FIV)	K - W (2" - 20")	BR	ASTM B062 (C83600)
F6 (FIV)	J - N (1-1/2" - 4")	A2 CS HB HC MO SS	ASTM A351 Gr. CN7M (N08007) ASTM A216 Gr. WCB (J03002) ASTM A494 Gr. N7M (N30007) ASTM A494 Gr. CW12MW (N30002) ASTM A494 Gr. M-35-2 (N04020) ASTM A351 Gr. CF8M (J92900)
FP (FIV)	D - P (1/2" - 6")	PV TF	ISO 1163-PVC-U,ED,078-05-33 ASTM D1710 Type 1, Grade 1, Class A or B PTFE
GP (GPI)	H - N (1" - 4")	TF	ASTM D1710 Type 1, Grade 1, Class A or B PTFE
HV (HVFD)	H - R (1" - 10")	BR CS SS	ASTM B062 (C83600) ASTM A216 Gr. WCB (J03002) ASTM A351 Gr. CF8M (J92900)
HT (HVFD-T)	H - K (1" - 2")	CS	ASTM A216 Gr. WCB (Liner = ASTM D1710 Type 1, Grade 1, Class A or B PTFE)

LP (LPI)	H (1")	HC TF	ASTM B574 (N10276) ASTM D1710 Type 1, Grade 1, Class A or B PTFE
LP (LPI)	J - M (1-1/2" - 3")	HC TF	ASTM A494 Gr. CW12MW (N30002) ASTM D1710 Type 1, Grade 1, Class A or B PTFE
M1 - M8 MCV	A - C (1/8" - 3/8")	A2 BR CS HB HC MO SS	ASTM B473 (N08020) ASTM B16 H02 TEMPER (C36000) ASTM A108 Gr 1215 (G12150) ASTM B335 (N10665 or N10675) ASTM B574 (N10276) ASTM B164 (N04400 or N04405) ASTM A479 Gr 316/316L (S31600/S31603)
SC (SCV)	F - N (3/4" - 4")	SS	ASTM A479 Gr 316/316L (S31600/S31603)
CB TC (SIV)	F - N (3/4" - 4")	TF	ASTM D1710 Type 1, Grade 1, Class A or B PTFE
SI (SSI)	D - K (1/2" - 2")	A2 BR CS HB HC MO SS	ASTM B473 (N08020) ASTM B16 H02 TEMPER (C36000) ASTM A108 Gr 1215 (G12150) ASTM B335 (N10665 or N10675) ASTM B574 (N10276) ASTM B164 (N04400 or N04405) ASTM A479 Gr 316/316L (S31600/S31603)
TV (TCV)	B - K (1/4" - 2")	BR CS SS	ASTM B16 H02 TEMPER (C36000) ASTM A108 Gr 1215 (G12150) ASTM A479 Gr 316/316L (S31600/S31603)
TF (TCV-F)	B - K (1/4" - 2")	BR CS SS	ASTM B16 H02 TEMPER (C36000) ASTM A108 Gr 1215 (G12150) ASTM A479 Gr 316/316L (S31600/S31603)
UV (UIV)	D - K (1/2" - 2")	A2 BR CS HB HC MO SS	ASTM B473 (N08020) ASTM B16 H02 TEMPER (C36000) ASTM A108 Gr 1215 (G12150) ASTM B335 (N10665 or N10675) ASTM B574 (N10276) ASTM B164 (N04400 or N04405) ASTM A479 Gr 316/316L (S31600/S31603)
U1 (UN-10)	C - J (3/8" - 1-1/2")	A2 CS HB HC MO SS	ASTM B473 (N08020) ASTM A108 Gr 1215 (G12150) ASTM B335 (N10665 or N10675) ASTM B574 (N10276) ASTM B164 (N04400 or N04405) ASTM A479 Gr 316/316L (S31600/S31603)
U3 (UN-3)	C - N (3/8" - 4")	A2 BR CS HB HC MO SS	ASTM B473 (N08020) ASTM B16 H02 TEMPER (C36000) ASTM A108 Gr 1215 (G12150) ASTM B335 (N10665 or N10675) ASTM B574 (N10276) ASTM B164 (N04400 or N04405) ASTM A479 Gr 316/316L (S31600/S31603)
US (UN-SW)	C - N (3/8" - 4")	A2 CS HB HC MO SS	ASTM B473 (N08020) ASTM A108 Gr 1018 (G10180) ASTM B335 (N10665 or N10675) ASTM B574 (N10276) ASTM B164 (N04400 or N04405) ASTM A479 Gr 316/316L (S31600/S31603)
WV (WIV)	D - N (1/2" - 4")	A2 BR CS HB HC MO SS	ASTM B473 (N08020) ASTM B16 H02 TEMPER (C36000) ASTM A108 Gr 1215 (G12150) ASTM B335 (N10665 or N10675) ASTM B574 (N10276) ASTM B164 (N04400 or N04405) ASTM A479 Gr 316/316L (S31600/S31603)

Other valve materials are available. If you have a valve made of another material, please consult the factory for the material identification. Please supply the style, size and material code of the valve when contacting the factory.

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