



RELIABLE SOLUTIONS FOR THE FUTURE

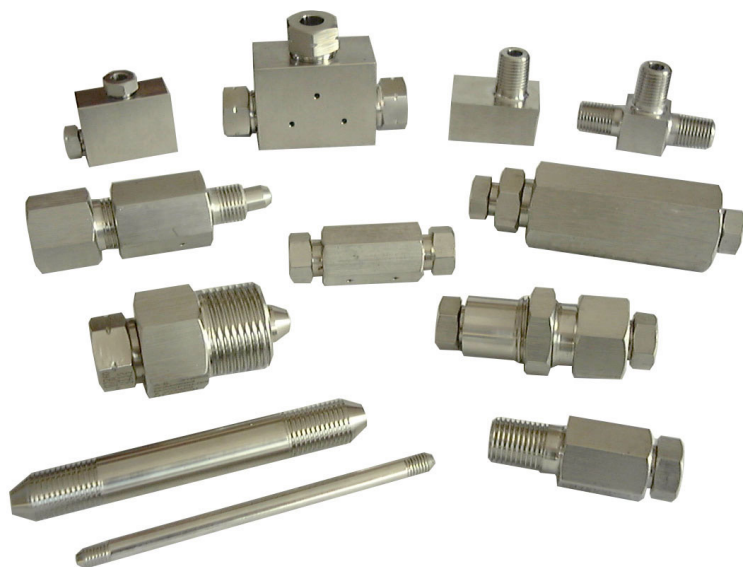
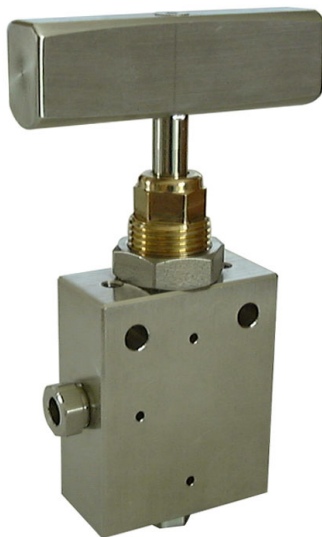
**QUICK REFERENCE GUIDE
TO HIGH PRESSURE EQUIPMENT**

About Us

CTC Pressure Products, LLC provides customers with personal service for the solutions and resources needed to succeed. Our key team members have a combined experience of over 100 years in the design, manufacture and assembly of high pressure and ultra high pressure products. As a founder-led company, we are dedicated to delivering high quality products and dependable services, 24 hours a day 7 days a week, for total customer satisfaction. Contact CTC Pressure Products, LLC and find the perfect product for your specific needs and requirements.

History

The Coned and Threaded Connection originated out of a US Government research program in the late 1920s. Fixed Nitrogen Research Laboratory (FNRL) focused on a means for converting atmospheric nitrogen to nitrates. Those means involved high pressure which necessitated the development of a high pressure tube connection to be machined into pressure vessels, valves, and fittings. FNRL worked with an American company to develop the coned and threaded connection and components. By the mid-1950s, valves, fittings, tubing and other accessories of high strength steel, were brought to market with a coned and threaded connection.

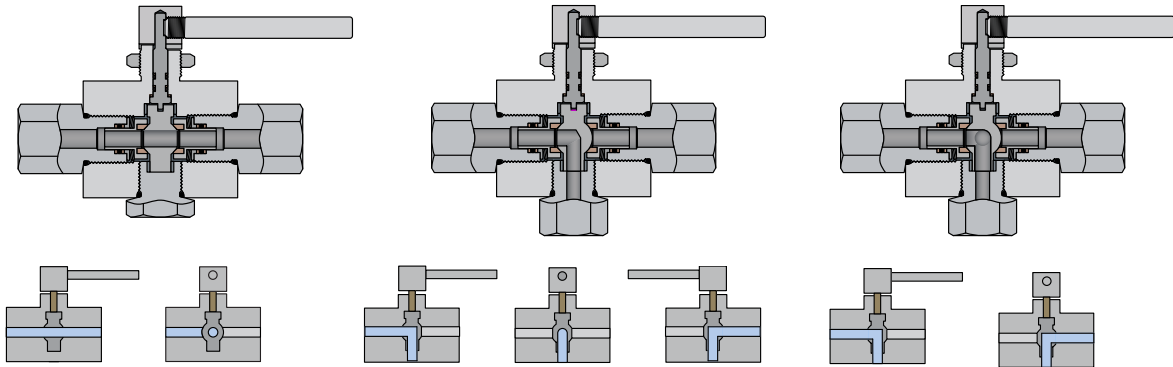


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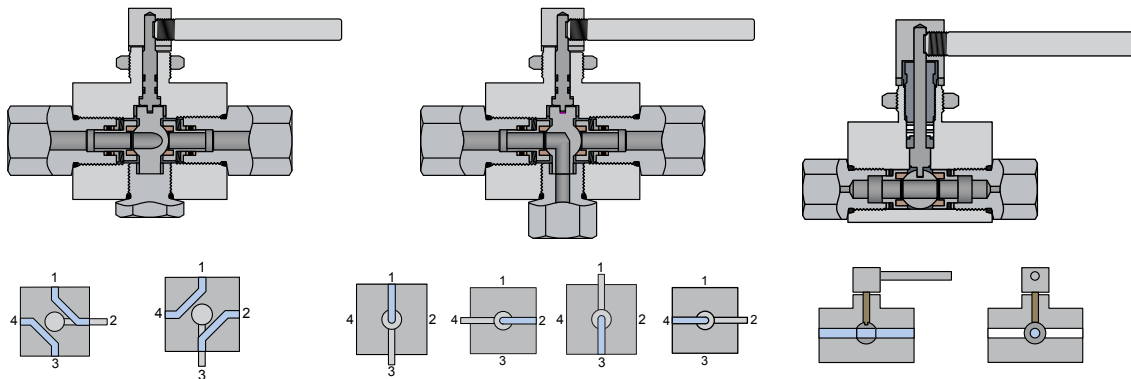
Coned & Threaded Equipment		Pressures from 20,000 PSI to 100,000 PSI
Adapter, HP Female		12
Adapter, HP Male	.....	19
Adapter, MP Female	.....	10
Adapter, MP Male	.....	17
Adapter, UHP Female	.....	14
Adapter, UHP Male	.....	21
Adapter Coupling, HP	.....	11
Adapter Coupling, MP	.....	9
Adapter Coupling, UHP	.....	13
Bulkhead	.....	5
Cap	.....	5
Check Valve	.....	6
Connection Components (collar, gland, plug, anti-vibration gland)	.....	7
Coupling	.....	5
Cross	.....	5
Elbow	.....	5
Filter	.....	6
Needle Valve	.....	3
Nipple	.....	7
Safety Head	.....	6
Tee	.....	5
Tubing	.....	8
Pipe Equipment		Pressures to 15,000 PSI
Adapter, NPT Female	.....	16
Adapter, NPT Male	.....	23
Adapter Coupling	.....	15
Bulkhead	.....	27
Cap	.....	27
Check Valve	.....	29
Coupling	.....	27
Cross	.....	27
Elbow	.....	27
Filter	.....	29
Needle Valve		25
Nipple		28
Plug		27
Safety Head		29
Tee		28
Union		27
Related Equipment		
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BALL VALVES



	2-way Trunnion		3-way Switching		3-way Diverting	
Port	MAWP PSI (bar)	Catalog Number	MAWP PSI (bar)	Catalog Number	MAWP PSI (bar)	Catalog Number
3/16"	20,000 (1380)	BV-T3V	20,000 (1380)	BV-S3V	20,000 (1380)	BV-D3V
1/4"	20,000 (1380)	BV-T4V	20,000 (1380)	BV-S4V	20,000 (1380)	BV-D4V
3/8"	20,000 (1380)	BV-T6V	20,000 (1380)	BV-S6V	20,000 (1380)	BV-D6V
1/2"	10,000 (690)	BV-T8V	10,000 (690)	BV-S8V	10,000 (690)	BV-D8V



	4-way		5-way		2-way Floating Ball	
Port	MAWP PSI (bar)	Catalog Number	MAWP PSI (bar)	Catalog Number	MAWP PSI (bar)	Catalog Number
3/16"	10,000 (690)	BV-43V	10,000 (690)	BV-53V	10,000 (690)	BV-23V
1/4"	10,000 (690)	BV-44V	10,000 (690)	BV-54V	20,000 (1380)	BV-24V
3/8"	10,000 (690)	BV-46V	10,000 (690)	BV-56V	20,000 (1380)	BV-26V
1/2"					10,000 (690)	BV-28V

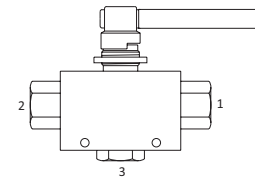
MAWP shown is the maximum working pressure for the base valve.
Final working pressure is determined by the selected end connections.



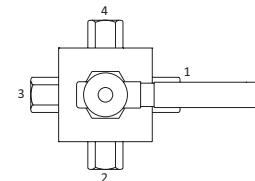
Ball Valve Part Number Breakdown

ASSEMBLY	BALL VALVE	VALVE STYLE	PORT SIZE	O-RING MATERIAL	CONNECTION DESIGNATOR	ACTUATOR
A	BV	- T	4	V	- 20K6	F
-A With collars/glands Blank No collars/glands		-2 2-way Floating Ball -T 2-way Trunnion -D 3-way Diverting -S 3-way Switching -4 4-way Crossover -5 5-way Switching	-3 3/16" -4 1/4" -6 3/8" -8 1/2"	-V Viton (standard) -B Buna-N -E EPDM -H High Temp Service to 550°F (220°C)	-20K4 1/4" MP -20K6 3/8" MP -20K6 9/16" MP -66K4 1/4" HP -66K6 3/8" HP -66K6 9/16" HP -2NPT 1/8" NPT -4NPT 1/4" NPT -6NPT 3/8" NPT -8NPT 1/2" NPT	-F Female -MC Male w/ cone plug -M Single-piece Male or NPT Male -SR -Blank Hand Valve -SR Spring Return -DA Double Acting

Other connections available, consult factory.
If more than one connection is required, specify in the order shown below.



3-way



4-way & 5-way

ABV-T4-20K6F

Ball Valve, 2-way Trunnion style, 1/4" port, 3/8" MP Cone & Thread connections, 20,000 psi MAWP

BV-S6-8NPTF

Ball Valve, 3-way Switching style, 3/8" port, 1/2" Female NPT connections, 15,000 psi MAWP

ABV-24-20K6F-4NPTM

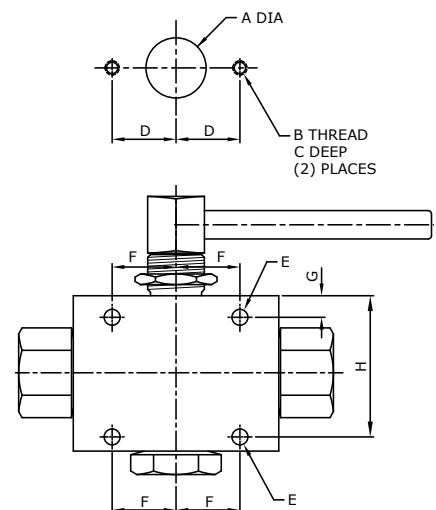
Ball Valve, 2-way Floating Ball style, 1/4" port, 3/8" MP Cone & Thread Female x 1/4" Male NPT, 15,000 psi MAWP

ABV-D3-20K4F-20K6F-20K4F-SR

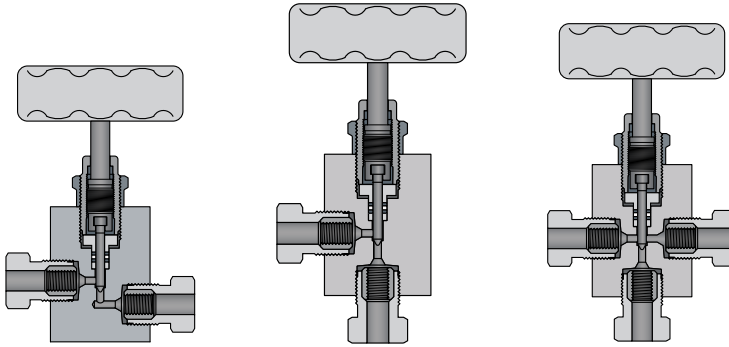
Ball Valve, 3-way Diverting style, 3/16" port, 1/4" MP Cone & Thread Female X 3/8" MP Cone & Thread Female with 1/4" MP Cone & Thread Female bottom connection, spring-return actuator, 20,000 psi MAWP

Dimensions for Mounting

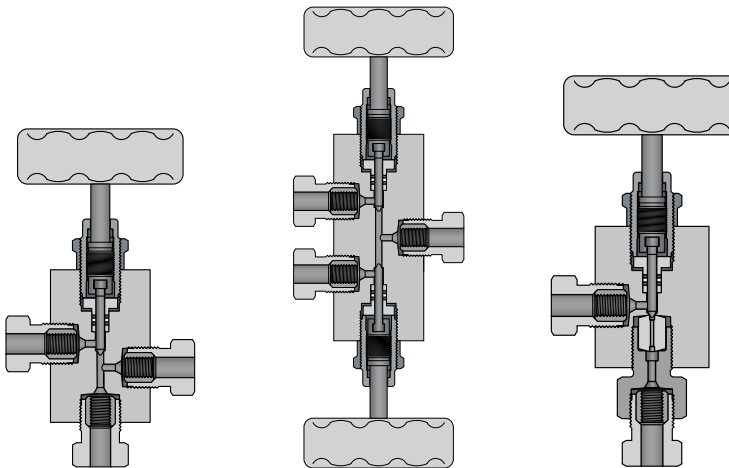
Valve	A	Max Panel Thickness	Tapped Top Mounts			Thru-Hole Mounting			
			B	C	D	E	F	G	H
BV-23	0.91	0.31							
BV-24	1.06	0.43	1/4"-20	0.43	0.75	0.28	0.75	0.43	
BV-26	1.06	0.43	1/4"-20	0.43	0.75	0.28	0.75	0.43	
BV-28						0.28	0.75	0.55	
BV-D3 BV-S3 BV-T3	1.06	0.43	1/4"-20	0.28	0.75	0.28	0.75		1.87
BV-D4 BV-S4 BV-T4	1.06	0.38				0.28	0.88		1.87
BV-D6 BV-S6 BV-T6	1.06	0.41	1/4"-20	0.38	1.12	0.28	1.00		2.50
BV-D8 BV-S8 BV-T8						0.28	0.75	0.55	
BV-43	1.06	0.43	1/4"-20	0.28	0.75	0.28	0.75		1.54
BV-44	1.06	0.38				0.28	0.88		1.87
BV-46	1.06	0.41				0.28	1.00		2.38
BV-53	1.06	0.43	1/4"-20	0.28	0.75	0.28	0.75		1.54
BV-54	1.06	0.38				0.28	0.88		1.87
BV-56	1.06	0.41				0.28	1.00		2.38



NEEDLE VALVES



Tube OD	MAWP PSI (bar)	2-way Straight	2-way Angle	3-way 1 Inlet Port
1/4"	20,000 (1380)	AVT-20K4-2S1	AVT-20K4-2A1	AVT-20K4-311
	66,000 (4554)	AVT-66K4-2S1	AVT-66K4-2A1	AVT-66K4-311
	100,000 (6900)	AVT-100K4-2S1	AVT-100K4-2A1	AVT-100K4-311
3/8"	20,000 (1380)	AVT-20K6-2S1	AVT-20K6-2A1	AVT-20K6-311
	66,000 (4554)	AVT-66K6-2S1	AVT-66K6-2A1	AVT-66K6-311
	100,000 (6900)	AVT-100K6-2S1	AVT-100K6-2A1	AVT-100K6-311
9/16"	20,000 (1380)	AVT-20K9-2S1	AVT-20K9-2A1	AVT-20K9-311
	40,000 (2760)	AVT-40K9-2S1	AVT-40K9-2A1	AVT-40K9-311
	66,000 (4554)	AVT-66K9-2S1	AVT-66K9-2A1	AVT-66K9-311
	100,000 (6900)	AVT-100K9-2S1	AVT-100K9-2A1	AVT-100K9-311
3/4"	20,000 (1380)	AV-20K12-2S1	AV-20K12-2A1	AV-20K12-311
	66,000 (4554)	AV-66K12-2S1	AV-66K12-2A1	AV-66K12-311
1"	20,000 (1380)	AV-20K16-2S1	AV-20K16-2A1	AV-20K16-311



Tube OD	MAWP PSI (bar)	3-way 2 Inlet Ports	2-stem Manifold	Replaceable Seat
1/4"	20,000 (1380)	AVT-20K4-321	AVT-20K4-331	AVT-20K4-2R1
	66,000 (4554)	AVT-66K4-321	AVT-66K4-331	AVT-66K4-2R1
	100,000 (6900)	AVT-100K4-321	AVT-100K4-331	AVT-100K4-2R1
3/8"	20,000 (1380)	AVT-20K6-321	AVT-20K6-331	AVT-20K6-2R1
	66,000 (4554)	AVT-66K6-321	AVT-66K6-331	AVT-66K6-2R1
	100,000 (6900)	AVT-100K6-321	AVT-100K6-331	AVT-100K6-2R1
9/16"	20,000 (1380)	AVT-20K9-321	AVT-20K9-331	AVT-20K9-2R1
	40,000 (2760)	AVT-40K9-321	AVT-40K9-331	AVT-40K9-2R1
	66,000 (4554)	AVT-66K9-321	AVT-66K9-331	AVT-66K9-2R1
	100,000 (6900)	AVT-100K9-321	AVT-100K9-331	AVT-100K9-2R1
3/4"	20,000 (1380)	AV-20K12-321	AV-20K12-331	AV-20K12-2R1
	66,000 (4554)	AV-66K12-321	AV-66K12-331	AV-66K12-2R1
1"	20,000 (1380)	AV-20K16-321	AV-20K16-331	AV-20K16-2R1



Needle Valve Part Number Breakdown

ASSEMBLY	VALVE STYLE	MAWP in KSI	CONNECTION SIZE	BODY STYLE	STEM TIP	ACTUATOR
A	VT	20K	4	2S	1	1
	V Non-rotating Stem	-15K	-4 1/4"	-2S Straight thru	-1 Vee	-Blank Hand Valve
	VT Two-piece Stem	-20K	-6 3/8"	-2A Angle	-2 Metering	-1 Actuated valve less actuator
		-66K	-9 9/16"	-31 Three-way, one on pressure	-3 Regulating	-2 Air-to-close 5"
		-100K	-12 3/4"	-32 Three-way, two on pressure		-3 Air-to-open 5"
			-16 1"	-33 Two-stem Manifold		-4 Air-to-close 8"
			-24 1-1/2"	-2R Replaceable Seat		-5 Air-to-open 8"
						-6 Double-acting 5"
						-7 Double Acting 8"
						-8 HD Double Acting
						-9 Double-Acting Hydraulic

AVT-20K4-321

Needle valve rated for 20,000 PSI, 1/4" MP Cone & Thread connections, Three-way two, inlet ports, Vee Stem

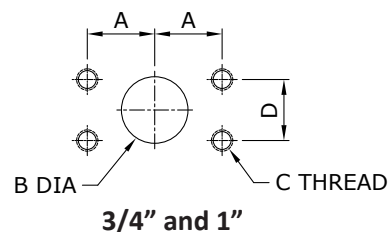
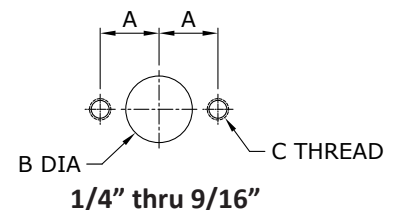
Needle Valve Options

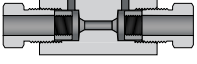
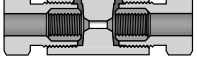
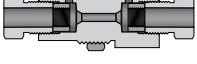
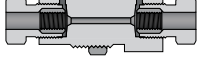
- GR Grafoil packing for service to 800°F (426°C)
- TFE Virgin Teflon packing for service to 450°F (232°C)
- C6WP 316 wetted parts
- STS Stellite tipped stem
- SRS Stellite replaceable seat (Replaceable seat valves, body style 6, only)
- GAV Anti-vibration glands instead of standard gland
- SOG Compliant with NACE MR-01-75 for sour gas service
- HT Extended bonnet, graphite packing and other materials for service temperatures to 1200°F (648°C)
- HTF Extended, finned bonnet, graphite packing and other materials for service temperatures to 1200°F (648°C)
- LT Extended bonnet, teflon packing and other materials for service temperatures to -423°F (-251°C)
- LTF Extended, finned bonnet, teflon packing and other materials for service temperatures to -423°F (-251°C)

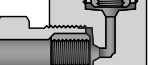
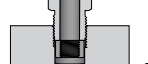
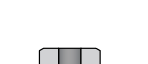
Dimensions for Panel Mounting

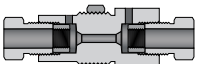
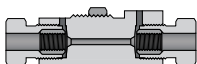
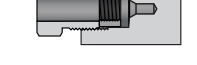
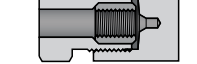
All needle valves include a panel mounting nut.

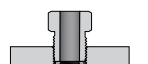
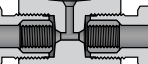
Valve	A	B	C	D	Thread Depth
1/4" MP	0.62"	0.78"	#10-24 UNC	---	0.38"
3/8" MP	(15.7)	(19.8)			(9.7)
9/16" MP	0.69"	0.84"	1/4"-20 UNC	---	0.38"
	(17.5)	(21.3)			(9.7)
1/4"-9/16" HP	0.69"	0.78"	1/4"-20 UNC	---	0.38"
	(17.5)	(19.8)			(9.7)
3/4"	1.18"	1.03"	5/16"-18 UNC	0.62"	0.68"
	(30.0)	(26.2)		(15.7)	(17.2)
1"	1.62"	1.41"	1/2"-20 UNF	0.88"	0.75"
	(41.1)	(35.8)		(22.4)	(19.1)

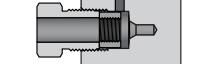
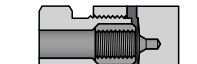


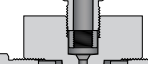
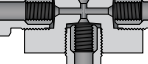
COUPLING	Tube OD	MAWP PSI (bar)	Catalog Number
	1/4"	20,000 (1380)	AC-20K4
		66,000 (4554)	AC-66K4
		100,000 (6900)	AC-100K4
	3/8"	20,000 (1380)	AC-20K6
		66,000 (4554)	AC-66K6
		100,000 (6900)	AC-100K6
	9/16"	20,000 (1380)	AC-20K9
		40,000 (2760)	AC-40K9
		66,000 (4554)	AC-66K9
		100,000 (6900)	AC-100K9
	3/4"	20,000 (1380)	AC-20K12
		66,000 (4554)	AC-66K12
	1"	20,000 (1380)	AC-20K16
	1-1/2"	15,000 (1035)	AC-15K24

ELBOW	Tube OD	MAWP PSI (bar)	Catalog Number
	1/4"	20,000 (1380)	AE-20K4
		66,000 (4554)	AE-66K4
		100,000 (6900)	AE-100K4
	3/8"	20,000 (1380)	AE-20K6
		66,000 (4554)	AE-66K6
		100,000 (6900)	AE-100K6
	9/16"	20,000 (1380)	AE-20K9
		40,000 (2760)	AE-40K9
		66,000 (4554)	AE-66K9
		100,000 (6900)	AE-100K9
	3/4"	20,000 (1380)	AE-20K12
		66,000 (4554)	AE-66K12
	1"	20,000 (1380)	AE-20K16
	1-1/2"	15,000 (1035)	AE-15K24

BULKHEAD	Tube OD	MAWP PSI (bar)	Catalog Number
	1/4"	20,000 (1380)	AB-20K4
		66,000 (4554)	AB-66K4
		100,000 (6900)	AB-100K4
	3/8"	20,000 (1380)	AB-20K6
		66,000 (4554)	AB-66K6
		100,000 (6900)	AB-100K6
	9/16"	20,000 (1380)	AB-20K9
		40,000 (2760)	AB-40K9
		66,000 (4554)	AB-66K9
		100,000 (6900)	AB-100K9
	3/4"	20,000 (1380)	AB-20K12
		66,000 (4554)	AB-66K12
	1"	20,000 (1380)	AB-20K16
	1-1/2"	15,000 (1035)	AB-15K24

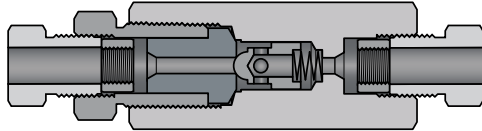
TEE	Tube OD	MAWP PSI (bar)	Catalog Number
	1/4"	20,000 (1380)	AT-20K4
		66,000 (4554)	AT-66K4
		100,000 (6900)	AT-100K4
	3/8"	20,000 (1380)	AT-20K6
		66,000 (4554)	AT-66K6
		100,000 (6900)	AT-100K6
	9/16"	20,000 (1380)	AT-20K9
		40,000 (2760)	AT-40K9
		66,000 (4554)	AT-66K9
		100,000 (6900)	AT-100K9
	3/4"	20,000 (1380)	AT-20K12
		66,000 (4554)	AT-66K12
	1"	20,000 (1380)	AT-20K16
	1-1/2"	15,000 (1035)	AT-15K24

CAP	Tube OD	MAWP PSI (bar)	Catalog Number
	1/4"	20,000 (1380)	ACP-20K4
		66,000 (4554)	ACP-66K4
		100,000 (6900)	ACP-100K4
	3/8"	20,000 (1380)	ACP-20K6
		66,000 (4554)	ACP-66K6
		100,000 (6900)	ACP-100K6
	9/16"	20,000 (1380)	ACP-20K9
		40,000 (2760)	ACP-40K9
		66,000 (4554)	ACP-66K9
		100,000 (6900)	ACP-100K9
	3/4"	20,000 (1380)	ACP-20K12
		66,000 (4554)	ACP-66K12
	1"	20,000 (1380)	ACP-20K16
	1-1/2"	15,000 (1035)	ACP-15K24

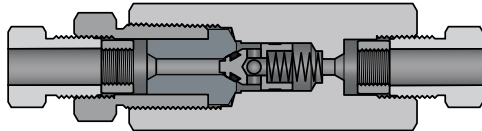
CROSS	Tube OD	MAWP PSI (bar)	Catalog Number
	1/4"	20,000 (1380)	AX-20K4
		66,000 (4554)	AX-66K4
		100,000 (6900)	AX-100K4
	3/8"	20,000 (1380)	AX-20K6
		66,000 (4554)	AX-66K6
		100,000 (6900)	AX-100K6
	9/16"	20,000 (1380)	AX-20K9
		40,000 (2760)	AX-40K9
		66,000 (4554)	AX-66K9
		100,000 (6900)	AX-100K9
	3/4"	20,000 (1380)	AX-20K12
		66,000 (4554)	AX-66K12
	1"	20,000 (1380)	AX-20K16
	1-1/2"	15,000 (1035)	AX-15K24



CHECK VALVE



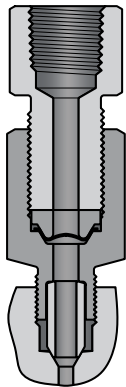
Ball Seat



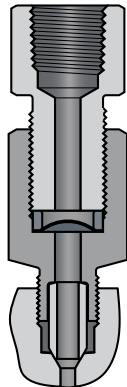
Soft Seat

Tube OD	MAWP PSI (bar)	Ball Seat	Soft Seat
1/4"	20,000 (1380)	ACV-20K4-BP	ACV-20K4-OP
	66,000 (4554)	ACV-66K4-BP	ACV-66K4-OP
	100,000 (6900)	ACV-100K4-BP	ACV-100K4-OP
3/8"	20,000 (1380)	ACV-20K6-BP	ACV-20K6-OP
	66,000 (4554)	ACV-66K6-BP	ACV-66K6-OP
	100,000 (6900)	ACV-100K6-BP	ACV-100K6-OP
9/16"	20,000 (1380)	ACV-20K9-BP	ACV-20K9-OP
	40,000 (2760)	ACV-40K9-BP	ACV-40K9-OP
	66,000 (4554)	ACV-66K9-BP	ACV-66K9-OP
3/4"	20,000 (1380)	ACV-20K12-BP	ACV-20K12-OP
	66,000 (4554)	ACV-66K12-BP	ACV-66K12-OP
1"	20,000 (1380)	ACV-20K16-BP	ACV-20K16-OP
1-1/2"	15,000 (1035)	ACV-15K24-BP	ACV-15K24-OP

SAFETY HEAD



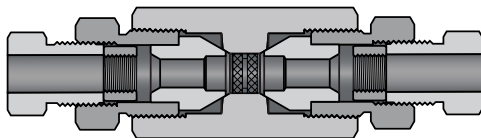
1/4" Angle Style



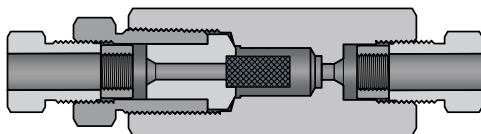
1/2" Flat Style

Tube OD	MAWP PSI (bar)	1/4" Angle Style	1/2" Flat Style
1/4"	20,000 (1380)	HD4-20K4	HD8-20K4
	66,000 (4554)	HD4-66K4	HD8-66K4
	100,000 (6900)	HD4-100K4	HD8-100K4
3/8"	20,000 (1380)	HD4-20K6	HD8-20K6
	66,000 (4554)	HD4-66K6	HD8-66K6
	100,000 (6900)	HD4-100K6	HD8-100K6
9/16"	20,000 (1380)	HD4-20K9	HD8-20K9
	40,000 (2760)	HD4-40K9	HD8-40K9
	66,000 (4554)	HD4-66K9	HD8-66K9
3/4"	20,000 (1380)	HD4-20K12	HD8-20K12
	66,000 (4554)	HD4-66K12	HD8-66K12
1"	20,000 (1380)	HD4-20K16	HD8-20K16
1-1/2"	15,000 (1035)	HD4-15K24	HD8-15K24

FILTER



Line



Cup

Tube OD	MAWP PSI (bar)	Line Filter	Cup Filter
1/4"	20,000 (1380)	ALF-20K4-XX-XX	ACF-20K4-XX
	66,000 (4554)	ALF-66K4-XX-XX	ACF-66K4-XX
	100,000 (6900)	ALF-100K4-XX-XX	ACF-100K4-XX
3/8"	20,000 (1380)	ALF-20K6-XX-XX	ACF-20K6-XX
	66,000 (4554)	ALF-66K6-XX-XX	ACF-66K6-XX
	100,000 (6900)	ALF-100K6-XX-XX	ACF-100K6-XX
9/16"	20,000 (1380)	ALF-20K9-XX-XX	ACF-20K9-XX
	40,000 (2760)	ALF-40K9-XX-XX	ACF-40K9-XX
	66,000 (4554)	ALF-66K9-XX-XX	ACF-66K9-XX
3/4"	20,000 (1380)	ALF-20K12-XX-XX	ACF-20K12-XX
	66,000 (4554)	ALF-66K12-XX-XX	ACF-66K12-XX
1"	20,000 (1380)	ALF-20K16-XX-XX	ACF-20K16-XX
1-1/2"	15,000 (1035)	ALF-15K24-XX-XX	ACF-15K24-XX

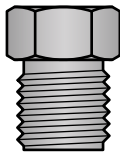
Complete catalog number by replacing -XX with required micron rating



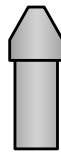
CONNECTION COMPONENTS



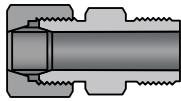
CLR-*



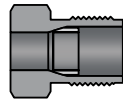
GND-*



PLG-*



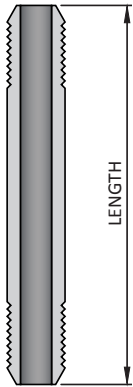
GAV-20K*



GAV-66K*
GAV-100K*

Tube OD	MAWP PSI (bar)	Collar	Gland	Plug	Anti-Vibration Gland
1/4"	20,000 (1380)	CLR-20K4	GND-20K4	PLG-20K4	GAV-20K4
	66,000 (4554)	CLR-66K4	GND-66K4	PLG-66K4	GAV-66K4
	100,000 (6900)	CLR-100K4	GND-100K4	PLG-100K4	GAV-100K4
3/8"	20,000 (1380)	CLR-20K6	GND-20K6	PLG-20K6	GAV-20K6
	66,000 (4554)	CLR-66K6	GND-66K6	PLG-66K6	GAV-66K6
	100,000 (6900)	CLR-100K6	GND-100K6	PLG-100K6	GAV-100K6
9/16"	20,000 (1380)	CLR-20K9	GND-20K9	PLG-20K9	GAV-20K9
	40,000 (2760)	CLR-40K9	GND-40K9	PLG-40K9	GAV-40K9
	66,000 (4554)	CLR-66K9	GND-66K9	PLG-66K9	GAV-66K9
3/4"	100,000 (6900)	CLR-100K9	GND-100K9	PLG-100K9	GAV-100K9
	20,000 (1380)	CLR-20K12	GND-20K12	PLG-20K12	GAV-20K12
	66,000 (4554)	CLR-66K12	GND-66K12	PLG-66K12	GAV-66K12
1"	20,000 (1380)	CLR-20K16	GND-20K16	PLG-20K16	GAV-20K16
1-1/2"	15,000 (1035)	CLR-15K24	GND-15K24	PLG-15K24	GAV-15K24

NIPPLE



Tube OD	MAWP PSI (bar)	Overall Length (L)			
		2.00" (50.8 mm)	2.75" (69.8 mm)	3.00" (76.2 mm)	4.00" (102 mm)
1/4"	20,000 (1380)	NPL-20K4-200	---	NPL-20K4-300	NPL-20K4-400
	66,000 (4554)	---	NPL-66K4-275	NPL-66K4-300	NPL-66K4-400
	100,000 (6900)	---	NPL-100K4-275	NPL-100K4-300	NPL-100K4-400
3/8"	20,000 (1380)	---	---	NPL-20K6-300	NPL-20K6-400
	66,000 (4554)	---	---	NPL-66K6-300	NPL-66K6-400
	100,000 (6900)	---	---	NPL-100K6-300	NPL-100K6-400
9/16"	20,000 (1380)	---	---	---	NPL-20K9-400
	40,000 (2760)	---	---	---	NPL-40K9-400
	66,000 (4554)	---	---	---	NPL-66K9-400
	100,000 (6900)	---	---	---	NPL-100K9-400
3/4"	20,000 (1380)	---	---	---	NPL-20K12-400
	66,000 (4554)	---	---	---	NPL-66K12-400

Tube OD	MAWP PSI (bar)	Overall Length (L)				
		4.50" (114 mm)	6.00" (152 mm)	8.00" (203 mm)	10.00" (254)	12.00" (305 mm)
1/4"	20,000 (1380)	---	NPL-20K4-600	NPL-20K4-800	NPL-20K4-1000	NPL-20K4-1200
	66,000 (4554)	---	NPL-66K4-600	NPL-66K4-800	NPL-66K4-1000	NPL-66K4-1200
	100,000 (6900)	---	NPL-100K4-600	NPL-100K4-800	NPL-100K4-1000	NPL-100K4-1200
3/8"	20,000 (1380)	---	NPL-20K6-600	NPL-20K6-800	NPL-20K6-1000	NPL-20K6-1200
	66,000 (4554)	---	NPL-66K6-600	NPL-66K6-800	NPL-66K6-1000	NPL-66K6-1200
	100,000 (6900)	---	NPL-100K6-600	NPL-100K6-800	NPL-100K6-1000	NPL-100K6-1200
9/16"	20,000 (1380)	---	NPL-20K9-600	NPL-20K9-800	NPL-20K9-1000	NPL-20K9-1200
	40,000 (2760)	---	NPL-40K9-600	NPL-40K9-800	NPL-40K9-1000	NPL-40K9-1200
	66,000 (4554)	---	NPL-66K9-600	NPL-66K9-800	NPL-66K9-1000	NPL-66K9-1200
	100,000 (6900)	---	NPL-100K9-600	NPL-100K9-800	NPL-100K9-1000	NPL-100K9-1200
3/4"	20,000 (1380)	---	NPL-20K12-600	NPL-20K12-800	NPL-20K12-1000	NPL-20K12-1200
	66,000 (4554)	---	NPL-66K12-600	NPL-66K12-800	NPL-66K12-1000	NPL-66K12-1200
1"	20,000 (1380)	NPL-20K16-450	NPL-20K16-600	NPL-20K16-800	NPL-20K16-1000	NPL-20K16-1200
1-1/2"	15,000 (1035)	---	---	NPL-15K24-800	NPL-15K24-1000	NPL-15K24-1200

Custom lengths available. Contact factory or your local representative.



TUBING



CTC offers a complete selection of austenitic, cold-drawn seamless stainless steel tubing for high pressure / high temperature applications requiring both strength and corrosion resistance.

Sizes from 1/8" to 1-1/2"

Pressures from 10,000 to 100,000 PSI.

Stocked tubing furnished in random lengths from 20 to 27 feet (6 to 8 meters)

40 foot (12 meter) lengths available on request

Standard stocked materials are 316SS and HP160. Chemical composition conforms to the current ASTM Specification A213 for TP304, TP316, TP316L, TP317L stainless steel. Other materials such as 3R60, Super Duplex, 6MO, Inconel, and Hastelloy are available.

Tube OD Inches (mm)	Tube ID Inches (mm)	Cone & Thread Connection Size	MAWP PSI (bar)	Catalog Number	Nominal Wall Thickness Inches (mm)
1/8" (3.18)	0.020 (0.5)	1/8" HP	66,000 (4554)	TU66-020-*	0.053 (1.34)
1/4" (6.35)	0.109 (2.77)	1/4" MP	20,000 (1380)	TU20-109-*	0.070 (1.78)
	0.083 (2.11)	1/4" HP	66,000 (4554)	TU66-083-*	0.083 (2.11)
	0.083 (2.11)	1/4" HP	100,000 (6900)	TU100-083-HP160	0.083 (2.11)
3/8" (9.53)	0.203 (5.16)	3/8" MP	20,000 (1380)	TU20-203-*	0.086 (2.18)
	0.125 (3.18)	3/8" HP	66,000 (4554)	TU66-125-*	0.125 (3.18)
	0.125 (3.18)	3/8" HP	100,000 (6900)	TU100-125-HP160	0.125 (3.18)
9/16" (14.3)	0.312 (7.92)	9/16" MP	20,000 (1380)	TU20-312-*	0.125 (3.18)
	0.250 (6.35)	9/16" HP40	40,000 (2760)	TU40-250-*	0.156 (4.02)
	0.187 (4.78)	9/16" HP	66,000 (4554)	TU60-188-*	0.187 (4.78)
	0.187 (4.78)	9/16" HP	100,000 (6900)	TU100-188-HP160	0.187 (4.78)
3/4" (19.1)	0.438 (11.1)	3/4" MP	20,000 (1380)	TU20-438-*	0.156 (4.02)
	0.25 (6.35)	3/4" HP	66,000 (4554)	TU66-250-*	0.250 (6.35)
1" (25.4)	0.688 (17.5)	1" MP	15,000 (1035)	TU10-688-*	0.156 (4.02)
	0.562 (14.3)	1" MP	20,000 (1380)	TU20-562-*	0.219 (5.56)
	0.562 (14.3)	1" HP43	43,000 (2967)	TU43-438-*	0.281 (7.14)
1-1/2" (38.1)	0.937 (23.8)	1-1/2" MP	15,000 (1035)	TU10-937-*	0.281 (7.14)

*Complete catalog number by designating -316 or -304 material.

Add suffix -40 to designate 40-foot (12 meter) lengths

2.5% Min MOLY TP316/316L TUBING

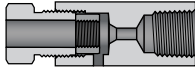
Tube OD Inches (mm)	Tube ID Inches (mm)	Cone & Thread Connection Size	MAWP PSI (bar)	Catalog Number	Nominal Wall Thickness Inches (mm)
1/4" (6.35)	0.109 (2.77)	1/4" MP	20,000 (1380)	TU20-109-3R60	0.070 (1.78)
3/8" (9.53)	0.203 (5.16)	3/8" MP	20,000 (1380)	TU20-203-3R60	0.086 (2.18)
9/16" /14.3)	0.312 (7.92)	9/16" MP	20,000 (1380)	TU20-312-3R60	0.125 (3.18)



CONNECTORS

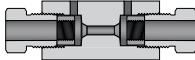
MP Cone & Thread Female

NPT Female



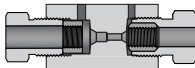
Size	1/4"	3/8"	9/16"	3/4"	1"	1-1/2"
1/8"	AC-20K4-2NPT 15,000 PSI	AC-20K6-2NPT 15,000 PSI	AC-20K9-2NPT 15,000 PSI	AC-20K12-2NPT 15,000 PSI	AC-20K16-2NPT 15,000 PSI	AC-15K24-2NPT 15,000 PSI
1/4"	AC-20K4-4NPT 15,000 PSI	AC-20K6-4NPT 15,000 PSI	AC-20K9-4NPT 15,000 PSI	AC-20K12-4NPT 15,000 PSI	AC-20K16-4NPT 15,000 PSI	AC-15K24-4NPT 15,000 PSI
3/8"	AC-20K4-6NPT 15,000 PSI	AC-20K6-6NPT 15,000 PSI	AC-20K9-6NPT 15,000 PSI	AC-20K12-6NPT 15,000 PSI	AC-20K16-6NPT 15,000 PSI	AC-15K24-6NPT 15,000 PSI
1/2"	AC-20K4-8NPT 15,000 PSI	AC-20K6-8NPT 15,000 PSI	AC-20K9-8NPT 15,000 PSI	AC-20K12-8NPT 15,000 PSI	AC-20K16-8NPT 15,000 PSI	AC-15K24-8NPT 15,000 PSI
3/4"	AC-20K4-12NPT 10,000 PSI	AC-20K6-12NPT 10,000 PSI	AC-20K9-12NPT 10,000 PSI	AC-20K12-12NPT 10,000 PSI	AC-20K16-12NPT 10,000 PSI	AC-15K24-12NPT 10,000 PSI
1"	AC-20K4-16NPT 10,000 PSI	AC-20K6-16NPT 10,000 PSI	AC-20K9-16NPT 10,000 PSI	AC-20K12-16NPT 10,000 PSI	AC-20K16-16NPT 10,000 PSI	AC-15K24-16NPT 10,000 PSI

MP Cone & Thread Female



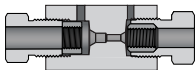
1/4"	AC-20K4 20,000 PSI	AC-20K4-20K6 20,000 PSI	AC-20K4-20K9 20,000 PSI	AC-20K4-20K12 20,000 PSI	AC-20K4-20K16 20,000 PSI	AC-20K4-15K24 15,000 PSI
3/8"	AC-20K4-20K6 20,000 PSI	AC-20K6 20,000 PSI	AC-20K6-20K9 20,000 PSI	AC-20K6-20K12 20,000 PSI	AC-20K6-20K16 20,000 PSI	AC-20K6-15K24 15,000 PSI
9/16"	AC-20K4-20K9 20,000 PSI	AC-20K6-20K9 20,000 PSI	AC-20K9 20,000 PSI	AC-20K9-20K12 20,000 PSI	AC-20K9-20K16 20,000 PSI	AC-20K9-15K24 15,000 PSI
3/4"	AC-20K4-20K12 20,000 PSI	AC-20K6-20K12 20,000 PSI	AC-20K9-20K12 20,000 PSI	AC-20K12 20,000 PSI	AC-20K12-20K16 20,000 PSI	AC-20K12-15K24 15,000 PSI
1"	AC-20K4-20K16 20,000 PSI	AC-20K6-20K16 20,000 PSI	AC-20K9-20K16 20,000 PSI	AC-20K12-20K16 20,000 PSI	AC-20K16 20,000 PSI	AC-20K16-15K24 15,000 PSI
1-1/2"	AC-20K4-15K24 15,000 PSI	AC-20K6-15K24 15,000 PSI	AC-20K9-15K24 15,000 PSI	AC-20K12-15K24 15,000 PSI	AC-20K16-15K24 15,000 PSI	AC-15K24 15,000 PSI

HP Cone & Thread Female



1/4"	AC-20K4-66K4 20,000 PSI	AC-20K6-66K4 20,000 PSI	AC-20K9-66K4 20,000 PSI	AC-20K12-66K4 20,000 PSI	AC-20K16-66K4 20,000 PSI	AC-15K24-66K4 15,000 PSI
3/8"	AC-20K4-66K6 20,000 PSI	AC-20K6-66K6 20,000 PSI	AC-20K9-66K6 20,000 PSI	AC-20K12-66K6 20,000 PSI	AC-20K16-66K6 20,000 PSI	AC-15K24-66K6 15,000 PSI
9/16"	AC-20K4-66K9 20,000 PSI	AC-20K6-66K9 20,000 PSI	AC-20K9-66K9 20,000 PSI	AC-20K12-66K9 20,000 PSI	AC-20K16-66K9 20,000 PSI	AC-15K24-66K9 15,000 PSI
3/4"	AC-20K4-66K12 20,000 PSI	AC-20K6-66K12 20,000 PSI	AC-20K9-66K12 20,000 PSI	AC-20K12-66K12 20,000 PSI	AC-20K16-66K12 20,000 PSI	AC-15K24-66K12 15,000 PSI

UHP Cone & Thread Female



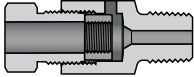
1/4"	AC-20K4-100K4 20,000 PSI	AC-20K6-100K4 20,000 PSI	AC-20K9-100K4 20,000 PSI	AC-20K12-100K4 20,000 PSI	AC-20K16-100K4 20,000 PSI	AC-15K24-100K4 15,000 PSI
3/8"	AC-20K4-100K6 20,000 PSI	AC-20K6-100K6 20,000 PSI	AC-20K9-100K6 20,000 PSI	AC-20K12-100K6 20,000 PSI	AC-20K16-100K6 20,000 PSI	AC-15K24-100K6 15,000 PSI
9/16"	AC-20K4-100K9 20,000 PSI	AC-20K6-100K9 20,000 PSI	AC-20K9-100K9 20,000 PSI	AC-20K12-100K9 20,000 PSI	AC-20K16-100K9 20,000 PSI	AC-15K24-100K9 15,000 PSI
3/4"	AC-20K4-100K12 20,000 PSI	AC-20K6-100K12 20,000 PSI	AC-20K9-100K12 20,000 PSI	AC-20K12-100K12 20,000 PSI	AC-20K16-100K12 20,000 PSI	AC-15K24-100K12 15,000 PSI



CONNECTORS

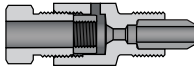
MP Cone & Thread Female

NPT Male



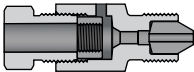
Size	1/4"	3/8"	9/16"	3/4"	1"	1-1/2"
1/8"	AA-20K4F-2NPTM 15,000 PSI	AA-20K6F-2NPTM 15,000 PSI	AA-20K9F-2NPTM 15,000 PSI	AA-20K12F-2NPTM 15,000 PSI	AA-20K16F-2NPTM 15,000 PSI	AA-15K24F-2NPTM 15,000 PSI
1/4"	AA-20K4F-4NPTM 15,000 PSI	AA-20K6F-4NPTM 15,000 PSI	AA-20K9F-4NPTM 15,000 PSI	AA-20K12F-4NPTM 15,000 PSI	AA-20K16F-4NPTM 15,000 PSI	AA-15K24F-4NPTM 15,000 PSI
3/8"	AA-20K4F-6NPTM 15,000 PSI	AA-20K6F-6NPTM 15,000 PSI	AA-20K9F-6NPTM 15,000 PSI	AA-20K12F-6NPTM 15,000 PSI	AA-20K16F-6NPTM 15,000 PSI	AA-15K24F-6NPTM 15,000 PSI
1/2"	AA-20K4F-8NPTM 15,000 PSI	AA-20K6F-8NPTM 15,000 PSI	AA-20K9F-8NPTM 15,000 PSI	AA-20K12F-8NPTM 15,000 PSI	AA-20K16F-8NPTM 15,000 PSI	AA-15K24F-8NPTM 15,000 PSI
3/4"	AA-20K4F-12NPTM 10,000 PSI	AA-20K6F-12NPTM 10,000 PSI	AA-20K9F-12NPTM 10,000 PSI	AA-20K12F-12NPTM 10,000 PSI	AA-20K16F-12NPTM 10,000 PSI	AA-15K24F-12NPTM 10,000 PSI
1"	AA-20K4F-16NPTM 10,000 PSI	AA-20K6F-16NPTM 10,000 PSI	AA-20K9F-16NPTM 10,000 PSI	AA-20K12F-16NPTM 10,000 PSI	AA-20K16F-16NPTM 10,000 PSI	AA-15K24F-16NPTM 10,000 PSI

MP Cone & Thread Male



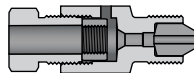
1/4"	AA-20K4F-20K4M 20,000 PSI	AA-20K6F-20K4M 20,000 PSI	AA-20K9F-20K4M 20,000 PSI	AA-20K12F-20K4M 20,000 PSI	AA-20K16F-20K4M 20,000 PSI	AA-15K24F-20K4M 15,000 PSI
3/8"	AA-20K4F-20K6MC 20,000 PSI	AA-20K6F-20K6MC 20,000 PSI	AA-20K9F-20K6MC 20,000 PSI	AA-20K12F-20K6MC 20,000 PSI	AA-20K16F-20K6MC 20,000 PSI	AA-15K24F-20K6MC 15,000 PSI
9/16"	AA-20K4F-20K9MC 20,000 PSI	AA-20K6F-20K9MC 20,000 PSI	AA-20K9F-20K9MC 20,000 PSI	AA-20K12F-20K9MC 20,000 PSI	AA-20K16F-20K9MC 20,000 PSI	AA-15K24F-20K9MC 15,000 PSI
3/4"	AA-20K4F-20K12MC 20,000 PSI	AA-20K6F-20K12MC 20,000 PSI	AA-20K9F-20K12MC 20,000 PSI	AA-20K12F-20K12MC 20,000 PSI	AA-20K16F-20K12MC 20,000 PSI	AA-15K24F-20K12MC 15,000 PSI
1"	AA-20K4F-20K16MC 20,000 PSI	AA-20K6F-20K16MC 20,000 PSI	AA-20K9F-20K16MC 20,000 PSI	AA-20K12F-20K16MC 20,000 PSI	AA-20K16F-20K16MC 20,000 PSI	AA-15K24F-20K16MC 15,000 PSI
1-1/2"	AA-20K4F-15K24MC 15,000 PSI	AA-20K6F-15K24MC 15,000 PSI	AA-20K9F-15K24MC 15,000 PSI	AA-20K12F-15K24MC 15,000 PSI	AA-20K16F-15K24MC 15,000 PSI	AA-15K24F-15K24MC 15,000 PSI

HP Cone & Thread Male



1/4"	AA-20K4F-66K4MC 20,000 PSI	AA-20K6F-66K4MC 20,000 PSI	AA-20K9F-66K4MC 20,000 PSI	AA-20K12F-66K4MC 20,000 PSI	AA-20K16F-66K4MC 20,000 PSI	AA-15K24F-66K4MC 15,000 PSI
3/8"	AA-20K4F-66K6MC 20,000 PSI	AA-20K6F-66K6MC 20,000 PSI	AA-20K9F-66K6MC 20,000 PSI	AA-20K12F-66K6MC 20,000 PSI	AA-20K16F-66K6MC 20,000 PSI	AA-15K24F-66K6MC 15,000 PSI
9/16"	AA-20K4F-66K9MC 20,000 PSI	AA-20K6F-66K9MC 20,000 PSI	AA-20K9F-66K9MC 20,000 PSI	AA-20K12F-66K9MC 20,000 PSI	AA-20K16F-66K9MC 20,000 PSI	AA-15K24F-66K9MC 15,000 PSI
3/4"	AA-20K4F-66K12MC 20,000 PSI	AA-20K6F-66K12MC 20,000 PSI	AA-20K9F-66K12MC 20,000 PSI	AA-20K12F-66K12MC 20,000 PSI	AA-20K16F-66K12MC 20,000 PSI	AA-15K24F-66K12MC 15,000 PSI

UHP Cone & Thread Male



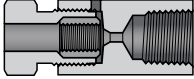
1/4"	AA-20K4F-100K4MC 20,000 PSI	AA-20K6F-100K4MC 20,000 PSI	AA-20K9F-100K4MC 20,000 PSI	AA-20K12F-100K4MC 20,000 PSI	AA-20K16F-100K4MC 20,000 PSI	AA-15K24F-100K4MC 15,000 PSI
3/8"	AA-20K4F-100K6MC 20,000 PSI	AA-20K6F-100K6MC 20,000 PSI	AA-20K9F-100K6MC 20,000 PSI	AA-20K12F-100K6MC 20,000 PSI	AA-20K16F-100K6MC 20,000 PSI	AA-15K24F-100K6MC 15,000 PSI
9/16"	AA-20K4F-100K9MC 20,000 PSI	AA-20K6F-100K9MC 20,000 PSI	AA-20K9F-100K9MC 20,000 PSI	AA-20K12F-100K9MC 20,000 PSI	AA-20K16F-100K9MC 20,000 PSI	AA-15K24F-100K9MC 15,000 PSI
3/4"	AA-20K4F-100K12MC 20,000 PSI	AA-20K6F-100K12MC 20,000 PSI	AA-20K9F-100K12MC 20,000 PSI	AA-20K12F-100K12MC 20,000 PSI	AA-20K16F-100K12MC 20,000 PSI	AA-15K24F-100K12MC 15,000 PSI



CONNECTORS

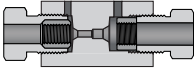
HP Cone & Thread Female

NPT Female



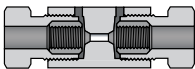
Size	1/4"	3/8"	9/16"	3/4"
1/8"	AC-66K4-2NPT 15,000 PSI	AC-66K6-2NPT 15,000 PSI	AC-66K9-2NPT 15,000 PSI	AC-66K12-2NPT 15,000 PSI
1/4"	AC-66K4-4NPT 15,000 PSI	AC-66K6-4NPT 15,000 PSI	AC-66K9-4NPT 15,000 PSI	AC-66K12-4NPT 15,000 PSI
3/8"	AC-66K4-6NPT 15,000 PSI	AC-66K6-6NPT 15,000 PSI	AC-66K9-6NPT 15,000 PSI	AC-66K12-6NPT 15,000 PSI
1/2"	AC-66K4-8NPT 15,000 PSI	AC-66K6-8NPT 15,000 PSI	AC-66K9-8NPT 15,000 PSI	AC-66K12-8NPT 15,000 PSI
3/4"	AC-66K4-12NPT 10,000 PSI	AC-66K6-12NPT 10,000 PSI	AC-66K9-12NPT 10,000 PSI	AC-66K12-12NPT 10,000 PSI
1"	AC-66K4-16NPT 10,000 PSI	AC-66K6-16NPT 10,000 PSI	AC-66K9-16NPT 10,000 PSI	AC-66K12-16NPT 10,000 PSI

MP Cone & Thread Female



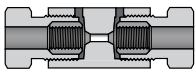
1/4"	AC-20K4-66K4 20,000 PSI	AC-20K4-66K6 20,000 PSI	AC-20K4-66K9 20,000 PSI	AC-20K4-66K12 20,000 PSI
3/8"	AC-20K6-66K4 20,000 PSI	AC-20K6-66K6 20,000 PSI	AC-20K6-66K9 20,000 PSI	AC-20K6-66K12 20,000 PSI
9/16"	AC-20K9-66K4 20,000 PSI	AC-20K9-66K6 20,000 PSI	AC-20K9-66K9 20,000 PSI	AC-20K9-66K12 20,000 PSI
3/4"	AC-20K12-66K4 20,000 PSI	AC-20K12-66K6 20,000 PSI	AC-20K12-66K9 20,000 PSI	AC-20K12-66K12 20,000 PSI
1"	AC-20K16-66K4 20,000 PSI	AC-20K16-66K6 20,000 PSI	AC-20K16-66K9 20,000 PSI	AC-20K16-66K12 20,000 PSI
1-1/2"	AC-15K24-66K4 15,000 PSI	AC-15K24-66K6 15,000 PSI	AC-15K24-66K9 15,000 PSI	AC-15K24-66K12 15,000 PSI

HP Cone & Thread Female



1/4"	AC-66K4 66,000 PSI	AC-66K4-66K6 66,000 PSI	AC-66K4-66K9 66,000 PSI	AC-66K4-66K12 66,000 PSI
3/8"	AC-66K4-66K6 66,000 PSI	AC-66K6 66,000 PSI	AC-66K6-66K9 66,000 PSI	AC-66K6-66K12 66,000 PSI
9/16"	AC-66K4-66K9 66,000 PSI	AC-66K6-66K9 66,000 PSI	AC-66K9 66,000 PSI	AC-66K9-66K12 66,000 PSI
3/4"	AC-66K4-66K12 66,000 PSI	AC-66K6-66K12 66,000 PSI	AC-66K9-66K12 66,000 PSI	AC-66K12 66,000 PSI

UHP Cone & Thread Female



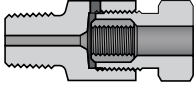
1/4"	AC-66K4-100K4 66,000 PSI	AC-66K6-100K4 66,000 PSI	AC-66K9-100K4 66,000 PSI	AC-66K12-100K4 66,000 PSI
3/8"	AC-66K4-100K6 66,000 PSI	AC-66K6-100K6 66,000 PSI	AC-66K9-100K6 66,000 PSI	AC-66K12-100K6 66,000 PSI
9/16"	AC-66K4-100K9 66,000 PSI	AC-66K6-100K9 66,000 PSI	AC-66K9-100K9 66,000 PSI	AC-66K12-100K9 66,000 PSI
3/4"	AC-66K4-100K12 66,000 PSI	AC-66K6-100K12 66,000 PSI	AC-66K9-100K12 66,000 PSI	AC-66K12-100K12 66,000 PSI



CONNECTORS

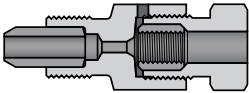
HP Cone & Thread Female

NPT Male



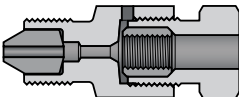
Size	1/4"	3/8"	9/16"	3/4"
1/8"	AA-66K4F-2NPTM 15,000 PSI	AA-66K6F-2NPTM 15,000 PSI	AA-66K9F-2NPTM 15,000 PSI	AA-66K12F-2NPTM 15,000 PSI
1/4"	AA-66K4F-4NPTM 15,000 PSI	AA-66K6F-4NPTM 15,000 PSI	AA-66K9F-4NPTM 15,000 PSI	AA-66K12F-4NPTM 15,000 PSI
3/8"	AA-66K4F-6NPTM 15,000 PSI	AA-66K6F-6NPTM 15,000 PSI	AA-66K9F-6NPTM 15,000 PSI	AA-66K12F-6NPTM 15,000 PSI
1/2"	AA-66K4F-8NPTM 15,000 PSI	AA-66K6F-8NPTM 15,000 PSI	AA-66K9F-8NPTM 15,000 PSI	AA-66K12F-8NPTM 15,000 PSI
3/4"	AA-66K4F-12NPTM 10,000 PSI	AA-66K6F-12NPTM 10,000 PSI	AA-66K9F-12NPTM 10,000 PSI	AA-66K12F-12NPTM 10,000 PSI
1"	AA-66K4F-16NPTM 10,000 PSI	AA-66K6F-16NPTM 10,000 PSI	AA-66K9F-16NPTM 10,000 PSI	AA-66K12F-16NPTM 10,000 PSI

MP Cone & Thread Male



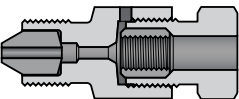
1/4"	AA-66K4F-20K4M 20,000 PSI	AA-66K6F-20K4M 20,000 PSI	AA-66K9F-20K4M 20,000 PSI	AA-66K12F-20K4M 20,000 PSI
3/8"	AA-66K4F-20K6MC 20,000 PSI	AA-66K6F-20K6MC 20,000 PSI	AA-66K9F-20K6MC 20,000 PSI	AA-66K12F-20K6MC 20,000 PSI
9/16"	AA-66K4F-20K9MC 20,000 PSI	AA-66K6F-20K9MC 20,000 PSI	AA-66K9F-20K9MC 20,000 PSI	AA-66K12F-20K9MC 20,000 PSI
3/4"	AA-66K4F-20K12MC 20,000 PSI	AA-66K6F-20K12MC 20,000 PSI	AA-66K9F-20K12MC 20,000 PSI	AA-66K12F-20K12MC 20,000 PSI
1"	AA-66K4F-20K16MC 20,000 PSI	AA-66K6F-20K16MC 20,000 PSI	AA-66K9F-20K16MC 20,000 PSI	AA-66K12F-20K16MC 20,000 PSI
1-1/2"	AA-66K4F-15K24MC 15,000 PSI	AA-66K6F-15K24MC 15,000 PSI	AA-66K9F-15K24MC 15,000 PSI	AA-66K12F-15K24MC 15,000 PSI

HP Cone & Thread Male



1/4"	AA-66K4F-66K4MC 66,000 PSI	AA-66K6F-66K4MC 66,000 PSI	AA-66K9F-66K4MC 66,000 PSI	AA-66K12F-66K4MC 66,000 PSI
3/8"	AA-66K4F-66K6MC 66,000 PSI	AA-66K6F-66K6MC 66,000 PSI	AA-66K9F-66K6MC 66,000 PSI	AA-66K12F-66K6MC 66,000 PSI
9/16"	AA-66K4F-66K9MC 66,000 PSI	AA-66K6F-66K9MC 66,000 PSI	AA-66K9F-66K9MC 66,000 PSI	AA-66K12F-66K9MC 66,000 PSI
3/4"	AA-66K4F-66K12MC 66,000 PSI	AA-66K6F-66K12MC 66,000 PSI	AA-66K9F-66K12MC 66,000 PSI	AA-66K12F-66K12MC 66,000 PSI

UHP Cone & Thread Male



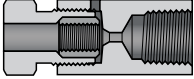
1/4"	AA-66K4F-100K4MC 66,000 PSI	AA-66K6F-100K4MC 66,000 PSI	AA-66K9F-100K4MC 66,000 PSI	AA-66K12F-100K4MC 66,000 PSI
3/8"	AA-66K4F-100K6MC 66,000 PSI	AA-66K6F-100K6MC 66,000 PSI	AA-66K9F-100K6MC 66,000 PSI	AA-66K12F-100K6MC 66,000 PSI
9/16"	AA-66K4F-100K9MC 66,000 PSI	AA-66K6F-100K9MC 66,000 PSI	AA-66K9F-100K9MC 66,000 PSI	AA-66K12F-100K9MC 66,000 PSI
3/4"	AA-66K4F-100K12MC 66,000 PSI	AA-66K6F-100K12MC 66,000 PSI	AA-66K9F-100K12MC 66,000 PSI	AA-66K12F-100K12MC 66,000 PSI



CONNECTORS

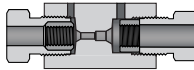
UHP Cone & Thread Female

NPT Female



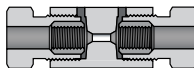
Size	1/4"	3/8"	9/16"	3/4"
1/8"	AC-100K4-2NPT 15,000 PSI	AC-100K6-2NPT 15,000 PSI	AC-100K9-2NPT 15,000 PSI	AC-100K12-2NPT 15,000 PSI
1/4"	AC-100K4-4NPT 15,000 PSI	AC-100K6-4NPT 15,000 PSI	AC-100K9-4NPT 15,000 PSI	AC-100K12-4NPT 15,000 PSI
3/8"	AC-100K4-6NPT 15,000 PSI	AC-100K6-6NPT 15,000 PSI	AC-100K9-6NPT 15,000 PSI	AC-100K12-6NPT 15,000 PSI
1/2"	AC-100K4-8NPT 15,000 PSI	AC-100K6-8NPT 15,000 PSI	AC-100K9-8NPT 15,000 PSI	AC-100K12-8NPT 15,000 PSI
3/4"	AC-100K4-12NPT 10,000 PSI	AC-100K6-12NPT 10,000 PSI	AC-100K9-12NPT 10,000 PSI	AC-100K12-12NPT 10,000 PSI
1"	AC-100K4-16NPT 10,000 PSI	AC-100K6-16NPT 10,000 PSI	AC-100K9-16NPT 10,000 PSI	AC-100K12-16NPT 10,000 PSI

MP Cone & Thread Female



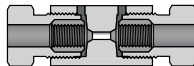
1/4"	AC-20K4-100K4 20,000 PSI	AC-20K4-100K6 20,000 PSI	AC-20K4-100K9 20,000 PSI	AC-20K4-100K12 20,000 PSI
3/8"	AC-20K6-100K4 20,000 PSI	AC-20K6-100K6 20,000 PSI	AC-20K6-100K9 20,000 PSI	AC-20K6-100K12 20,000 PSI
9/16"	AC-20K9-100K4 20,000 PSI	AC-20K9-100K6 20,000 PSI	AC-20K9-100K9 20,000 PSI	AC-20K9-100K12 20,000 PSI
3/4"	AC-20K12-100K4 20,000 PSI	AC-20K12-100K6 20,000 PSI	AC-20K12-100K9 20,000 PSI	AC-20K12-100K12 20,000 PSI
1"	AC-20K16-100K4 20,000 PSI	AC-20K16-100K6 20,000 PSI	AC-20K16-100K9 20,000 PSI	AC-20K16-100K12 20,000 PSI
1-1/2"	AC-15K24-100K4 15,000 PSI	AC-15K24-100K6 15,000 PSI	AC-15K24-100K9 15,000 PSI	AC-15K24-100K12 15,000 PSI

HP Cone & Thread Female



1/4"	AC-66K4-100K4 66,000 PSI	AC-66K4-100K6 66,000 PSI	AC-66K4-100K9 66,000 PSI	AC-66K4-100K12 66,000 PSI
3/8"	AC-66K6-100K4 66,000 PSI	AC-66K6-100K6 66,000 PSI	AC-66K6-100K9 66,000 PSI	AC-66K6-100K12 66,000 PSI
9/16"	AC-66K9-100K4 66,000 PSI	AC-66K9-100K6 66,000 PSI	AC-66K9-100K9 66,000 PSI	AC-66K9-100K12 66,000 PSI
3/4"	AC-66K12-100K4 66,000 PSI	AC-66K12-100K6 66,000 PSI	AC-66K12-100K9 66,000 PSI	AC-66K12-100K12 66,000 PSI

UHP Cone & Thread Female



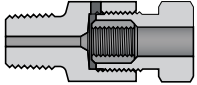
1/4"	AC-100K4 100,000 PSI	AC-100K4-100K6 100,000 PSI	AC-100K4-100K9 100,000 PSI	AC-100K4-100K12 100,000 PSI
3/8"	AC-100K4-100K6 100,000 PSI	AC-100K6 100,000 PSI	AC-100K6-100K9 100,000 PSI	AC-100K6-100K12 100,000 PSI
9/16"	AC-100K4-100K9 100,000 PSI	AC-100K6-100K9 100,000 PSI	AC-100K9 100,000 PSI	AC-100K9-100K12 100,000 PSI
3/4"	AC-100K4-100K12 100,000 PSI	AC-100K6-100K12 100,000 PSI	AC-100K9-100K12 100,000 PSI	AC-100K12 100,000 PSI



CONNECTORS

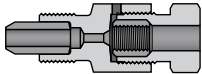
UHP Cone & Thread Female

NPT Male



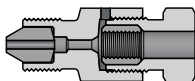
Size	1/4"	3/8"	9/16"	3/4"
1/8"	AC-100K4-2NPT 15,000 PSI	AC-100K6-2NPT 15,000 PSI	AC-100K9-2NPT 15,000 PSI	AC-100K12-2NPT 15,000 PSI
1/4"	AC-100K4-4NPT 15,000 PSI	AC-100K6-4NPT 15,000 PSI	AC-100K9-4NPT 15,000 PSI	AC-100K12-4NPT 15,000 PSI
3/8"	AC-100K4-6NPT 15,000 PSI	AC-100K6-6NPT 15,000 PSI	AC-100K9-6NPT 15,000 PSI	AC-100K12-6NPT 15,000 PSI
1/2"	AC-100K4-8NPT 15,000 PSI	AC-100K6-8NPT 15,000 PSI	AC-100K9-8NPT 15,000 PSI	AC-100K12-8NPT 15,000 PSI
3/4"	AC-100K4-12NPT 10,000 PSI	AC-100K6-12NPT 10,000 PSI	AC-100K9-12NPT 10,000 PSI	AC-100K12-12NPT 10,000 PSI
1"	AC-100K4-16NPT 10,000 PSI	AC-100K6-16NPT 10,000 PSI	AC-100K9-16NPT 10,000 PSI	AC-100K12-16NPT 10,000 PSI

MP Cone & Thread Male



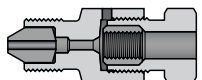
1/4"	AC-20K4-100K4 20,000 PSI	AC-20K4-100K6 20,000 PSI	AC-20K4-100K9 20,000 PSI	AC-20K4-100K12 20,000 PSI
3/8"	AC-20K6-100K4 20,000 PSI	AC-20K6-100K6 20,000 PSI	AC-20K6-100K9 20,000 PSI	AC-20K6-100K12 20,000 PSI
9/16"	AC-20K9-100K4 20,000 PSI	AC-20K9-100K6 20,000 PSI	AC-20K9-100K9 20,000 PSI	AC-20K9-100K12 20,000 PSI
3/4"	AC-20K12-100K4 20,000 PSI	AC-20K12-100K6 20,000 PSI	AC-20K12-100K9 20,000 PSI	AC-20K12-100K12 20,000 PSI
1"	AC-20K16-100K4 20,000 PSI	AC-20K16-100K6 20,000 PSI	AC-20K16-100K9 20,000 PSI	AC-20K16-100K12 20,000 PSI
1-1/2"	AC-15K24-100K4 15,000 PSI	AC-15K24-100K6 15,000 PSI	AC-15K24-100K9 15,000 PSI	AC-15K24-100K12 15,000 PSI

HP Cone & Thread Male



1/4"	AC-66K4-100K4 66,000 PSI	AC-66K4-100K6 66,000 PSI	AC-66K4-100K9 66,000 PSI	AC-66K4-100K12 66,000 PSI
3/8"	AC-66K6-100K4 66,000 PSI	AC-66K6-100K6 66,000 PSI	AC-66K6-100K9 66,000 PSI	AC-66K6-100K12 66,000 PSI
9/16"	AC-66K9-100K4 66,000 PSI	AC-66K9-100K6 66,000 PSI	AC-66K9-100K9 66,000 PSI	AC-66K9-100K12 66,000 PSI
3/4"	AC-66K12-100K4 66,000 PSI	AC-66K12-100K6 66,000 PSI	AC-66K12-100K9 66,000 PSI	AC-66K12-100K12 66,000 PSI

UHP Cone & Thread Male



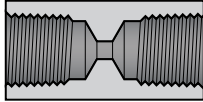
1/4"	AC-100K4 100,000 PSI	AC-100K4-100K6 100,000 PSI	AC-100K4-100K9 100,000 PSI	AC-100K4-100K12 100,000 PSI
3/8"	AC-100K4-100K6 100,000 PSI	AC-100K6 100,000 PSI	AC-100K6-100K9 100,000 PSI	AC-100K6-100K12 100,000 PSI
9/16"	AC-100K4-100K9 100,000 PSI	AC-100K6-100K9 100,000 PSI	AC-100K9 100,000 PSI	AC-100K9-100K12 100,000 PSI
3/4"	AC-100K4-100K12 100,000 PSI	AC-100K6-100K12 100,000 PSI	AC-100K9-100K12 100,000 PSI	AC-100K12 100,000 PSI



CONNECTORS

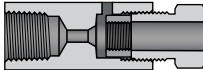
NPT Female

NPT Female



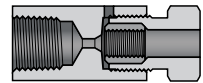
Size	1/8"	1/4"	3/8"	1/2"	3/4"	1"
1/8"	C-2NPT 15,000 PSI	C-2NPT-4NPT 15,000 PSI	C-2NPT-6NPT 15,000 PSI	C-2NPT-8NPT 15,000 PSI	C-2NPT-12NPT 10,000 PSI	C-2NPT-16NPT 10,000 PSI
1/4"	C-2NPT-4NPT 15,000 PSI	C-4NPT-4NPT 15,000 PSI	C-4NPT-6NPT 15,000 PSI	C-4NPT-8NPT 15,000 PSI	C-4NPT-12NPT 10,000 PSI	C-4NPT-16NPT 10,000 PSI
3/8"	C-2NPT-6NPT 15,000 PSI	C-4NPT-6NPT 15,000 PSI	C-6NPT 15,000 PSI	C-6NPT-8NPT 15,000 PSI	C-6NPT-12NPT 10,000 PSI	C-6NPT-16NPT 10,000 PSI
1/2"	C-2NPT-8NPT 15,000 PSI	C-4NPT-8NPT 15,000 PSI	C-6NPT-8NPT 15,000 PSI	C-8NPT 15,000 PSI	C-8NPT-12NPT 10,000 PSI	C-8NPT-16NPT 10,000 PSI
3/4"	C-2NPT-12NPT 10,000 PSI	C-4NPT-12NPT 10,000 PSI	C-6NPT-12NPT 10,000 PSI	C-8NPT-12NPT 10,000 PSI	C-12NPT 10,000 PSI	C-12NPT-16NPT 10,000 PSI
1"	C-2NPT-16NPT 10,000 PSI	C-4NPT-16NPT 10,000 PSI	C-6NPT-16NPT 10,000 PSI	C-8NPT-16NPT 10,000 PSI	C-12NPT-16NPT 10,000 PSI	C-16NPT 10,000 PSI

MP Cone & Thread Female



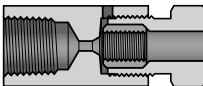
1/4"	AC-20K4-2NPT 15,000 PSI	AC-20K4-4NPT 15,000 PSI	AC-20K4-6NPT 15,000 PSI	AC-20K4-8NPT 15,000 PSI	AC-20K4-12NPT 10,000 PSI	AC-20K4-16NPT 10,000 PSI
3/8"	AC-20K6-2NPT 15,000 PSI	AC-20K6-4NPT 15,000 PSI	AC-20K6-6NPT 15,000 PSI	AC-20K6-8NPT 15,000 PSI	AC-20K6-12NPT 10,000 PSI	AC-20K6-16NPT 10,000 PSI
9/16"	AC-20K9-2NPT 15,000 PSI	AC-20K9-4NPT 15,000 PSI	AC-20K9-6NPT 15,000 PSI	AC-20K9-8NPT 15,000 PSI	AC-20K9-12NPT 10,000 PSI	AC-20K9-16NPT 10,000 PSI
3/4"	AC-20K12-2NPT 15,000 PSI	AC-20K12-4NPT 15,000 PSI	AC-20K12-6NPT 15,000 PSI	AC-20K12-8NPT 15,000 PSI	AC-20K12-12NPT 10,000 PSI	AC-20K12-16NPT 10,000 PSI
1"	AC-20K16-2NPT 10,000 PSI	AC-20K16-4NPT 10,000 PSI	AC-20K16-6NPT 10,000 PSI	AC-20K16-8NPT 10,000 PSI	AC-20K16-12NPT 10,000 PSI	AC-20K16-16NPT 10,000 PSI
1-1/2"	AC-15K24-2NPT 10,000 PSI	AC-15K24-4NPT 10,000 PSI	AC-15K24-6NPT 10,000 PSI	AC-15K24-8NPT 10,000 PSI	AC-15K24-12NPT 10,000 PSI	AC-15K24-16NPT 10,000 PSI

HP Cone & Thread Female



1/4"	AC-66K4-2NPT 15,000 PSI	AC-66K4-4NPT 15,000 PSI	AC-66K4-6NPT 15,000 PSI	AC-66K4-8NPT 15,000 PSI	AC-66K4-12NPT 10,000 PSI	AC-66K4-16NPT 10,000 PSI
3/8"	AC-66K6-2NPT 15,000 PSI	AC-66K6-4NPT 15,000 PSI	AC-66K6-6NPT 15,000 PSI	AC-66K6-8NPT 15,000 PSI	AC-66K6-12NPT 10,000 PSI	AC-66K6-16NPT 10,000 PSI
9/16"	AC-66K9-2NPT 15,000 PSI	AC-66K9-4NPT 15,000 PSI	AC-66K9-6NPT 15,000 PSI	AC-66K9-8NPT 15,000 PSI	AC-66K9-12NPT 10,000 PSI	AC-66K9-16NPT 10,000 PSI
3/4"	AC-66K12-2NPT 15,000 PSI	AC-66K12-4NPT 15,000 PSI	AC-66K12-6NPT 15,000 PSI	AC-66K12-8NPT 15,000 PSI	AC-66K12-12NPT 10,000 PSI	AC-66K12-16NPT 10,000 PSI

UHP Cone & Thread Female



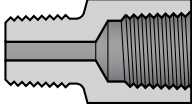
1/4"	AC-100K4-2NPT 15,000 PSI	AC-100K4-4NPT 15,000 PSI	AC-100K4-6NPT 15,000 PSI	AC-100K4-8NPT 15,000 PSI	AC-100K4-12NPT 10,000 PSI	AC-100K4-16NPT 10,000 PSI
3/8"	AC-100K6-2NPT 15,000 PSI	AC-100K6-4NPT 15,000 PSI	AC-100K6-6NPT 15,000 PSI	AC-100K6-8NPT 15,000 PSI	AC-100K6-12NPT 10,000 PSI	AC-100K6-16NPT 10,000 PSI
9/16"	AC-100K9-2NPT 15,000 PSI	AC-100K9-4NPT 15,000 PSI	AC-100K9-6NPT 15,000 PSI	AC-100K9-8NPT 15,000 PSI	AC-100K9-12NPT 10,000 PSI	AC-100K9-16NPT 10,000 PSI
3/4"	AC-100K12-2NPT 15,000 PSI	AC-100K12-4NPT 15,000 PSI	AC-100K12-6NPT 15,000 PSI	AC-100K12-8NPT 15,000 PSI	AC-100K12-12NPT 10,000 PSI	AC-100K12-16NPT 10,000 PSI



CONNECTORS

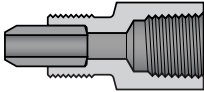
NPT Female

NPT Male



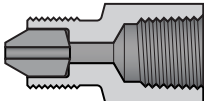
Size	1/8"	1/4"	3/8"	1/2"	3/4"	1"
1/8"	A-2NPTF-2NPTM 15,000 PSI	A-4NPTF-2NPTM 15,000 PSI	A-6NPTF-2NPTM 15,000 PSI	A-8NPTF-2NPTM 15,000 PSI	A-12NPTF-2NPTM 10,000 PSI	A-16NPTF-2NPTM 10,000 PSI
1/4"	A-2NPTF-4NPTM 15,000 PSI	A-4NPTF-4NPTM 15,000 PSI	A-6NPTF-4NPTM 15,000 PSI	A-8NPTF-4NPTM 15,000 PSI	A-12NPTF-4NPTM 10,000 PSI	A-16NPTF-4NPTM 10,000 PSI
3/8"	A-2NPTF-6NPTM 15,000 PSI	A-4NPTF-6NPTM 15,000 PSI	A-6NPTF-6NPTM 15,000 PSI	A-8NPTF-6NPTM 15,000 PSI	A-12NPTF-6NPTM 10,000 PSI	A-16NPTF-6NPTM 10,000 PSI
1/2"	A-2NPTF-8NPTM 15,000 PSI	A-4NPTF-8NPTM 15,000 PSI	A-6NPTF-8NPTM 15,000 PSI	A-8NPTF-8NPTM 15,000 PSI	A-12NPTF-8NPTM 10,000 PSI	A-16NPTF-8NPTM 10,000 PSI
3/4"	A-2NPTF-12NPTM 10,000 PSI	A-4NPTF-12NPTM 10,000 PSI	A-6NPTF-12NPTM 10,000 PSI	A-8NPTF-12NPTM 10,000 PSI	A-12NPTF-12NPTM 10,000 PSI	A-16NPTF-12NPTM 10,000 PSI
1"	A-2NPTF-16NPTM 10,000 PSI	A-4NPTF-16NPTM 10,000 PSI	A-6NPTF-16NPTM 10,000 PSI	A-8NPTF-16NPTM 10,000 PSI	A-12NPTF-16NPTM 10,000 PSI	A-16NPTF-16NPTM 10,000 PSI

MP Cone & Thread Male



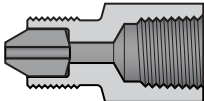
1/4"	A-20K4M-2NPTF 15,000 PSI	A-20K4M-4NPTF 15,000 PSI	A-20K4M-6NPTF 15,000 PSI	A-20K4M-8NPTF 15,000 PSI	A-20K4M-12NPTF 10,000 PSI	A-20K4M-16NPTF 10,000 PSI
3/8"	A-20K6MC-2NPTF 15,000 PSI	A-20K6MC-4NPTF 15,000 PSI	A-20K6MC-6NPTF 15,000 PSI	A-20K6MC-8NPTF 15,000 PSI	A-20K6MC-12NPTF 10,000 PSI	A-20K6MC-16NPTF 10,000 PSI
9/16"	A-20K9MC-2NPTF 15,000 PSI	A-20K9MC-4NPTF 15,000 PSI	A-20K9MC-6NPTF 15,000 PSI	A-20K9MC-8NPTF 15,000 PSI	A-20K9MC-12NPTF 10,000 PSI	A-20K9MC-16NPTF 10,000 PSI
3/4"	A-20K12MC-2NPTF 15,000 PSI	A-20K12MC-4NPTF 15,000 PSI	A-20K12MC-6NPTF 15,000 PSI	A-20K12MC-8NPTF 15,000 PSI	A-20K12MC-12NPTF 10,000 PSI	A-20K12MC-16NPTF 10,000 PSI
1"	A-20K16MC-2NPTF 15,000 PSI	A-20K16MC-4NPTF 15,000 PSI	A-20K16MC-6NPTF 15,000 PSI	A-20K16MC-8NPTF 15,000 PSI	A-20K16MC-12NPTF 10,000 PSI	A-20K16MC-16NPTF 10,000 PSI
1-1/2"	A-15K24MC-2NPTF 15,000 PSI	A-15K24MC-4NPTF 15,000 PSI	A-15K24MC-6NPTF 15,000 PSI	A-15K24MC-8NPTF 15,000 PSI	A-15K24MC-12NPTF 10,000 PSI	A-15K24MC-16NPTF 10,000 PSI

HP Cone & Thread Male



1/4"	A-66K4MC-2NPTF 15,000 PSI	A-66K4MC-4NPTF 15,000 PSI	A-66K4MC-6NPTF 15,000 PSI	A-66K4MC-8NPTF 15,000 PSI	A-66K4MC-12NPTF 10,000 PSI	A-66K4MC-16NPTF 10,000 PSI
3/8"	A-66K6MC-2NPTF 15,000 PSI	A-66K6MC-4NPTF 15,000 PSI	A-66K6MC-6NPTF 15,000 PSI	A-66K6MC-8NPTF 15,000 PSI	A-66K6MC-12NPTF 10,000 PSI	A-66K6MC-16NPTF 10,000 PSI
9/16"	A-66K9MC-2NPTF 15,000 PSI	A-66K9MC-4NPTF 15,000 PSI	A-66K9MC-6NPTF 15,000 PSI	A-66K9MC-8NPTF 15,000 PSI	A-66K9MC-12NPTF 10,000 PSI	A-66K9MC-16NPTF 10,000 PSI
3/4"	A-66K12MC-2NPTF 15,000 PSI	A-66K12MC-4NPTF 15,000 PSI	A-66K12MC-6NPTF 15,000 PSI	A-66K12MC-8NPTF 15,000 PSI	A-66K12MC-12NPTF 10,000 PSI	A-66K12MC-16NPTF 10,000 PSI

UHP Cone & Thread Male



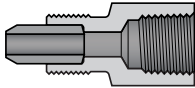
1/4"	A-100K4MC-2NPTF 15,000 PSI	A-100K4MC-4NPTF 15,000 PSI	A-100K4MC-6NPTF 15,000 PSI	A-100K4MC-8NPTF 15,000 PSI	A-100K4MC-12NPTF 10,000 PSI	A-100K4MC-16NPTF 10,000 PSI
3/8"	A-100K6MC-2NPTF 15,000 PSI	A-100K6MC-4NPTF 15,000 PSI	A-100K6MC-6NPTF 15,000 PSI	A-100K6MC-8NPTF 15,000 PSI	A-100K6MC-12NPTF 10,000 PSI	A-100K6MC-16NPTF 10,000 PSI
9/16"	A-100K9MC-2NPTF 15,000 PSI	A-100K9MC-4NPTF 15,000 PSI	A-100K9MC-6NPTF 15,000 PSI	A-100K9MC-8NPTF 15,000 PSI	A-100K9MC-12NPTF 10,000 PSI	A-100K9MC-16NPTF 10,000 PSI
3/4"	A-100K12MC-2NPTF 15,000 PSI	A-100K12MC-4NPTF 15,000 PSI	A-100K12MC-6NPTF 15,000 PSI	A-100K12MC-8NPTF 15,000 PSI	A-100K12MC-12NPTF 10,000 PSI	A-100K12MC-16NPTF 10,000 PSI



CONNECTORS

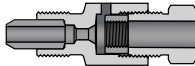
MP Cone & Thread Male

NPT Female



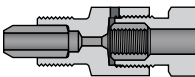
Size	1/4"	3/8"	9/16"	3/4"	1"	1-1/2"
1/8"	A-20K4M-2NPTF 15,000 PSI	A-20K6MC-2NPTF 15,000 PSI	A-20K9MC-2NPTF 15,000 PSI	A-20K12MC-2NPTF 15,000 PSI	A-20K16MC-2NPTF 15,000 PSI	A-15K24MC-2NPTF 15,000 PSI
1/4"	A-20K4M-4NPTF 15,000 PSI	A-20K6MC-4NPTF 15,000 PSI	A-20K9MC-4NPTF 15,000 PSI	A-20K12MC-4NPTF 15,000 PSI	A-20K16MC-4NPTF 15,000 PSI	A-15K24MC-4NPTF 15,000 PSI
3/8"	A-20K4M-6NPTF 15,000 PSI	A-20K6MC-6NPTF 15,000 PSI	A-20K9MC-6NPTF 15,000 PSI	A-20K12MC-6NPTF 15,000 PSI	A-20K16MC-6NPTF 15,000 PSI	A-15K24MC-6NPTF 15,000 PSI
1/2"	A-20K4M-8NPTF 15,000 PSI	A-20K6MC-8NPTF 15,000 PSI	A-20K9MC-8NPTF 15,000 PSI	A-20K12MC-8NPTF 15,000 PSI	A-20K16MC-8NPTF 15,000 PSI	A-15K24MC-8NPTF 15,000 PSI
3/4"	A-20K4M-12NPTF 10,000 PSI	A-20K6MC-12NPTF 10,000 PSI	A-20K9MC-12NPTF 10,000 PSI	A-20K12MC-12NPTF 10,000 PSI	A-20K16MC-12NPTF 10,000 PSI	A-15K24MC-12NPTF 10,000 PSI
1"	A-20K4M-16NPTF 10,000 PSI	A-20K6MC-16NPTF 10,000 PSI	A-20K9MC-16NPTF 10,000 PSI	A-20K12MC-16NPTF 10,000 PSI	A-20K16MC-16NPTF 10,000 PSI	A-15K24MC-16NPTF 10,000 PSI

MP Cone & Thread Female



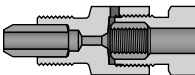
1/4"	AA-20K4F-20K4M 20,000 PSI	AA-20K4F-20K6MC 20,000 PSI	AA-20K4F-20K9MC 20,000 PSI	AA-20K4F-20K12MC 20,000 PSI	AA-20K4F-20K16MC 20,000 PSI	AA-20K4F-15K24MC 15,000 PSI
3/8"	AA-20K6F-20K4M 20,000 PSI	AA-20K6F-20K6MC 20,000 PSI	AA-20K6F-20K9MC 20,000 PSI	AA-20K6F-20K12MC 20,000 PSI	AA-20K6F-20K16MC 20,000 PSI	AA-20K6F-15K24MC 15,000 PSI
9/16"	AA-20K9F-20K4M 20,000 PSI	AA-20K9F-20K6MC 20,000 PSI	AA-20K9F-20K9MC 20,000 PSI	AA-20K9F-20K12MC 20,000 PSI	AA-20K9F-20K16MC 20,000 PSI	AA-20K9F-15K24MC 15,000 PSI
3/4"	AA-20K12F-20K4M 20,000 PSI	AA-20K12F-20K6MC 20,000 PSI	AA-20K12F-20K9MC 20,000 PSI	AA-20K12F-20K12MC 20,000 PSI	AA-20K12F-20K16MC 20,000 PSI	AA-20K12F-15K24MC 15,000 PSI
1"	AA-20K16F-20K4M 20,000 PSI	AA-20K16F-20K6MC 20,000 PSI	AA-20K16F-20K9MC 20,000 PSI	AA-20K16F-20K12MC 20,000 PSI	AA-20K16F-20K16MC 20,000 PSI	AA-20K16F-15K24MC 15,000 PSI
1-1/2"	AA-15K24F-20K4M 15,000 PSI	AA-15K24F-20K6MC 15,000 PSI	AA-15K24F-20K9MC 15,000 PSI	AA-15K24F-20K12MC 15,000 PSI	AA-15K24F-20K16MC 15,000 PSI	AA-15K24F-15K24MC 15,000 PSI

HP Cone & Thread Female



1/4"	AA-66K4F-20K4M 20,000 PSI	AA-66K4F-20K6MC 20,000 PSI	AA-66K4F-20K9MC 20,000 PSI	AA-66K4F-20K12MC 20,000 PSI	AA-66K4F-20K16MC 20,000 PSI	AA-66K4F-15K24MC 15,000 PSI
3/8"	AA-66K6F-20K4M 20,000 PSI	AA-66K6F-20K6MC 20,000 PSI	AA-66K6F-20K9MC 20,000 PSI	AA-66K6F-20K12MC 20,000 PSI	AA-66K6F-20K16MC 20,000 PSI	AA-66K6F-15K24MC 15,000 PSI
9/16"	AA-66K9F-20K4M 20,000 PSI	AA-66K9F-20K6MC 20,000 PSI	AA-66K9F-20K9MC 20,000 PSI	AA-66K9F-20K12MC 20,000 PSI	AA-66K9F-20K16MC 20,000 PSI	AA-66K9F-15K24MC 15,000 PSI
3/4"	AA-66K12F-20K4M 20,000 PSI	AA-66K12F-20K6MC 20,000 PSI	AA-66K12F-20K9MC 20,000 PSI	AA-66K12F-20K12MC 20,000 PSI	AA-66K12F-20K16MC 20,000 PSI	AA-66K12F-15K24MC 15,000 PSI

UHP Cone & Thread Female



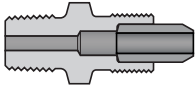
1/4"	AA-100K4F-20K4M 20,000 PSI	AA-100K4F-20K6MC 20,000 PSI	AA-100K4F-20K9MC 20,000 PSI	AA-100K4F-20K12MC 20,000 PSI	AA-100K4F-20K16MC 20,000 PSI	AA-100K4F-15K24MC 15,000 PSI
3/8"	AA-100K6F-20K4M 20,000 PSI	AA-100K6F-20K6MC 20,000 PSI	AA-100K6F-20K9MC 20,000 PSI	AA-100K6F-20K12MC 20,000 PSI	AA-100K6F-20K16MC 20,000 PSI	AA-100K6F-15K24MC 15,000 PSI
9/16"	AA-100K9F-20K4M 20,000 PSI	AA-100K9F-20K6MC 20,000 PSI	AA-100K9F-20K9MC 20,000 PSI	AA-100K9F-20K12MC 20,000 PSI	AA-100K9F-20K16MC 20,000 PSI	AA-100K9F-15K24MC 15,000 PSI
3/4"	AA-100K12F-20K4M 20,000 PSI	AA-100K12F-20K6MC 20,000 PSI	AA-100K12F-20K9MC 20,000 PSI	AA-100K12F-20K12MC 20,000 PSI	AA-100K12F-20K16MC 20,000 PSI	AA-100K12F-15K24MC 15,000 PSI



CONNECTORS

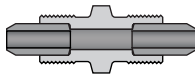
MP Cone & Thread Male

NPT Male



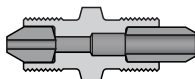
Size	1/4"	3/8"	9/16"	3/4"	1"	1-1/2"
1/8"	A-20K4M-2NPTM 15,000 PSI	A-20K6M-2NPTM 15,000 PSI	A-20K9M-2NPTM 15,000 PSI	A-20K12M-2NPTM 15,000 PSI	A-20K16M-2NPTM 15,000 PSI	A-15K24M-2NPTM 15,000 PSI
1/4"	A-20K4M-4NPTM 15,000 PSI	A-20K6M-4NPTM 15,000 PSI	A-20K9M-4NPTM 15,000 PSI	A-20K12M-4NPTM 15,000 PSI	A-20K16M-4NPTM 15,000 PSI	A-15K24M-4NPTM 15,000 PSI
3/8"	A-20K4M-6NPTM 15,000 PSI	A-20K6M-6NPTM 15,000 PSI	A-20K9M-6NPTM 15,000 PSI	A-20K12M-6NPTM 15,000 PSI	A-20K16M-6NPTM 15,000 PSI	A-15K24M-6NPTM 15,000 PSI
1/2"	A-20K4M-8NPTM 15,000 PSI	A-20K6M-8NPTM 15,000 PSI	A-20K9M-8NPTM 15,000 PSI	A-20K12M-8NPTM 15,000 PSI	A-20K16M-8NPTM 15,000 PSI	A-15K24M-8NPTM 15,000 PSI
3/4"	A-20K4M-12NPTM 10,000 PSI	A-20K6M-12NPTM 10,000 PSI	A-20K9M-12NPTM 10,000 PSI	A-20K12M-12NPTM 10,000 PSI	A-20K16M-12NPTM 10,000 PSI	A-15K24M-12NPTM 10,000 PSI
1"	A-20K4M-16NPTM 10,000 PSI	A-20K6M-16NPTM 10,000 PSI	A-20K9M-16NPTM 10,000 PSI	A-20K12M-16NPTM 10,000 PSI	A-20K16M-16NPTM 10,000 PSI	A-15K24M-16NPTM 10,000 PSI

MP Cone & Thread Male



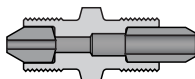
1/4"	A-20K4M 20,000 PSI	A-20K4M-20K6MC 20,000 PSI	A-20K4M-20K9MC 20,000 PSI	A-20K4M-20K12MC 20,000 PSI	A-20K4M-20K16MC 20,000 PSI	A-20K4M-15K24MC 15,000 PSI
3/8"	A-20K4M-20K6MC 20,000 PSI	A-20K6MC 20,000 PSI	A-20K6MC-20K9MC 20,000 PSI	A-20K6MC-20K12MC 20,000 PSI	A-20K6MC-20K16MC 20,000 PSI	A-20K6MC-15K24MC 15,000 PSI
9/16"	A-20K4M-20K9MC 20,000 PSI	A-20K6MC-20K9MC 20,000 PSI	A-20K9MC 20,000 PSI	A-20K9MC-20K12MC 20,000 PSI	A-20K9MC-20K16MC 20,000 PSI	A-20K9MC-15K24MC 15,000 PSI
3/4"	A-20K4M-20K12MC 20,000 PSI	A-20K6MC-20K12MC 20,000 PSI	A-20K9MC-20K12MC 20,000 PSI	A-20K12MC 20,000 PSI	A-20K12MC-20K16MC 20,000 PSI	A-20K12MC-15K24MC 15,000 PSI
1"	A-20K4M-20K16MC 20,000 PSI	A-20K6MC-20K16MC 20,000 PSI	A-20K9MC-20K16MC 20,000 PSI	A-20K12MC-20K16MC 20,000 PSI	A-20K16MC 20,000 PSI	A-20K16MC-15K24MC 15,000 PSI
1-1/2"	A-20K4M-15K24MC 15,000 PSI	A-20K6MC-15K24MC 15,000 PSI	A-20K9MC-15K24MC 15,000 PSI	A-20K12MC-15K24MC 15,000 PSI	A-20K16MC-15K24MC 15,000 PSI	A-15K24 15,000 PSI

HP Cone & Thread Male



1/4"	A-20K4M-66K4MC 20,000 PSI	A-20K6MC-66K4MC 20,000 PSI	A-20K9MC-66K4MC 20,000 PSI	A-20K12MC-66K4MC 20,000 PSI	A-20K16MC-66K4MC 20,000 PSI	A-15K24MC-66K4MC 15,000 PSI
3/8"	A-20K4M-66K6MC 20,000 PSI	A-20K6MC-66K6MC 20,000 PSI	A-20K9MC-66K6MC 20,000 PSI	A-20K12MC-66K6MC 20,000 PSI	A-20K16MC-66K6MC 20,000 PSI	A-15K24MC-66K6MC 15,000 PSI
9/16"	A-20K4M-66K9MC 20,000 PSI	A-20K6MC-66K9MC 20,000 PSI	A-20K9MC-66K9MC 20,000 PSI	A-20K12MC-66K9MC 20,000 PSI	A-20K16MC-66K9MC 20,000 PSI	A-15K24MC-66K9MC 15,000 PSI
3/4"	A-20K4M-66K12MC 20,000 PSI	A-20K6MC-66K12MC 20,000 PSI	A-20K9MC-66K12MC 20,000 PSI	A-20K12MC-66K12MC 20,000 PSI	A-20K16MC-66K12MC 20,000 PSI	A-15K24MC-66K12MC 15,000 PSI

UHP Cone & Thread Male



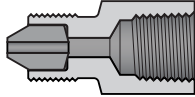
1/4"	A-20K4M-100K4MC 20,000 PSI	A-20K6MC-100K4MC 20,000 PSI	A-20K9MC-100K4MC 20,000 PSI	A-20K12MC-100K4MC 20,000 PSI	A-20K16MC-100K4MC 20,000 PSI	A-15K24MC-100K4MC 15,000 PSI
3/8"	A-20K4M-100K6MC 20,000 PSI	A-20K6MC-100K6MC 20,000 PSI	A-20K9MC-100K6MC 20,000 PSI	A-20K12MC-100K6MC 20,000 PSI	A-20K16MC-100K6MC 20,000 PSI	A-15K24MC-100K6MC 15,000 PSI
9/16"	A-20K4M-100K9MC 20,000 PSI	A-20K6MC-100K9MC 20,000 PSI	A-20K9MC-100K9MC 20,000 PSI	A-20K12MC-100K9MC 20,000 PSI	A-20K16MC-100K9MC 20,000 PSI	A-15K24MC-100K9MC 15,000 PSI
3/4"	A-20K4M-100K12MC 20,000 PSI	A-20K6MC-100K12MC 20,000 PSI	A-20K9MC-100K12MC 20,000 PSI	A-20K12MC-100K12MC 20,000 PSI	A-20K16MC-100K12MC 20,000 PSI	A-15K24MC-100K12MC 15,000 PSI



CONNECTORS

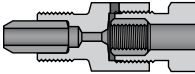
HP Cone & Thread Male

NPT Female



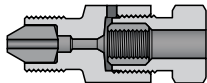
Size	1/4"	3/8"	9/16"	3/4"
1/8"	A-66K4MC-2NPTF 15,000 PSI	A-66K6MC-2NPTF 15,000 PSI	A-66K9MC-2NPTF 15,000 PSI	A-66K12MC-2NPTF 15,000 PSI
1/4"	A-66K4MC-4NPTF 15,000 PSI	A-66K6MC-4NPTF 15,000 PSI	A-66K9MC-4NPTF 15,000 PSI	A-66K12MC-4NPTF 15,000 PSI
3/8"	A-66K4MC-6NPTF 15,000 PSI	A-66K6MC-6NPTF 15,000 PSI	A-66K9MC-6NPTF 15,000 PSI	A-66K12MC-6NPTF 15,000 PSI
1/2"	A-66K4MC-8NPTF 15,000 PSI	A-66K6MC-8NPTF 15,000 PSI	A-66K9MC-8NPTF 15,000 PSI	A-66K12MC-8NPTF 15,000 PSI
3/4"	A-66K4MC-12NPTF 10,000 PSI	A-66K6MC-12NPTF 10,000 PSI	A-66K9MC-12NPTF 10,000 PSI	A-66K12MC-12NPTF 10,000 PSI
1"	A-66K4MC-16NPTF 10,000 PSI	A-66K6MC-16NPTF 10,000 PSI	A-66K9MC-16NPTF 10,000 PSI	A-66K12MC-16NPTF 10,000 PSI

MP Cone & Thread Female



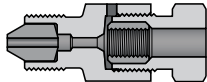
1/4"	AA-20K4F-66K4MC 20,000 PSI	AA-20K4F-66K6MC 20,000 PSI	AA-20K4F-66K9MC 20,000 PSI	AA-20K4F-66K12MC 20,000 PSI
3/8"	AA-20K6F-66K4MC 20,000 PSI	AA-20K6F-66K6MC 20,000 PSI	AA-20K6F-66K9MC 20,000 PSI	AA-20K6F-66K12MC 20,000 PSI
9/16"	AA-20K9F-66K4MC 20,000 PSI	AA-20K9F-66K6MC 20,000 PSI	AA-20K9F-66K9MC 20,000 PSI	AA-20K9F-66K12MC 20,000 PSI
3/4"	AA-20K12F-66K4MC 20,000 PSI	AA-20K12F-66K6MC 20,000 PSI	AA-20K12F-66K9MC 20,000 PSI	AA-20K12F-66K12MC 20,000 PSI
1"	AA-20K16F-66K4MC 20,000 PSI	AA-20K16F-66K6MC 20,000 PSI	AA-20K16F-66K9MC 20,000 PSI	AA-20K16F-66K12MC 20,000 PSI
1-1/2"	AA-15K24F-66K4MC 15,000 PSI	AA-15K24F-66K6MC 15,000 PSI	AA-15K24F-66K9MC 15,000 PSI	AA-15K24F-66K12MC 15,000 PSI

HP Cone & Thread Female



1/4"	AA-66K4F-66K4MC 66,000 PSI	AA-66K4F-66K6MC 66,000 PSI	AA-66K4F-66K9MC 66,000 PSI	AA-66K4F-66K12MC 66,000 PSI
3/8"	AA-66K6F-66K4MC 66,000 PSI	AA-66K6F-66K6MC 66,000 PSI	AA-66K6F-66K9MC 66,000 PSI	AA-66K6F-66K12MC 66,000 PSI
9/16"	AA-66K9F-66K4MC 66,000 PSI	AA-66K9F-66K6MC 66,000 PSI	AA-66K9F-66K9MC 66,000 PSI	AA-66K9F-66K12MC 66,000 PSI
3/4"	AA-66K12F-66K4MC 66,000 PSI	AA-66K12F-66K6MC 66,000 PSI	AA-66K12F-66K9MC 66,000 PSI	AA-66K12F-66K12MC 66,000 PSI

UHP Cone & Thread Female



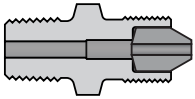
1/4"	AA-100K4F-66K4MC 66,000 PSI	AA-100K4F-66K6MC 66,000 PSI	AA-100K4F-66K9MC 66,000 PSI	AA-100K4F-66K12MC 66,000 PSI
3/8"	AA-100K6F-66K4MC 66,000 PSI	AA-100K6F-66K6MC 66,000 PSI	AA-100K6F-66K9MC 66,000 PSI	AA-100K6F-66K12MC 66,000 PSI
9/16"	AA-100K9F-66K4MC 66,000 PSI	AA-100K9F-66K6MC 66,000 PSI	AA-100K9F-66K9MC 66,000 PSI	AA-100K9F-66K12MC 66,000 PSI
3/4"	AA-100K12F-66K4MC 66,000 PSI	AA-100K12F-66K6MC 66,000 PSI	AA-100K12F-66K9MC 66,000 PSI	AA-100K12F-66K12MC 66,000 PSI



CONNECTORS

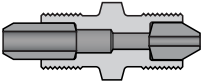
HP Cone & Thread Male

NPT Male



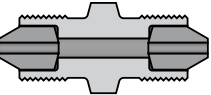
Size	1/4"	3/8"	9/16"	3/4"
1/8"	A-66K4MC-2NPTM 15,000 PSI	A-66K6MC-2NPTM 15,000 PSI	A-66K9MC-2NPTM 15,000 PSI	A-66K12MC-2NPTM 15,000 PSI
1/4"	A-66K4MC-4NPTM 15,000 PSI	A-66K6MC-4NPTM 15,000 PSI	A-66K9MC-4NPTM 15,000 PSI	A-66K12MC-4NPTM 15,000 PSI
3/8"	A-66K4MC-6NPTM 15,000 PSI	A-66K6MC-6NPTM 15,000 PSI	A-66K9MC-6NPTM 15,000 PSI	A-66K12MC-6NPTM 15,000 PSI
1/2"	A-66K4MC-8NPTM 15,000 PSI	A-66K6MC-8NPTM 15,000 PSI	A-66K9MC-8NPTM 15,000 PSI	A-66K12MC-8NPTM 15,000 PSI
3/4"	A-66K4MC-12NPTM 10,000 PSI	A-66K6MC-12NPTM 10,000 PSI	A-66K9MC-12NPTM 10,000 PSI	A-66K12MC-12NPTM 10,000 PSI
1"	A-66K4MC-16NPTM 10,000 PSI	A-66K6MC-16NPTM 10,000 PSI	A-66K9MC-16NPTM 10,000 PSI	A-66K12MC-16NPTM 10,000 PSI

MP Cone & Thread Male



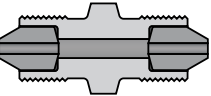
1/4"	A-20K4M-66K4MC 20,000 PSI	A-20K4M-66K6MC 20,000 PSI	A-20K4M-66K9MC 20,000 PSI	A-20K4M-66K12MC 20,000 PSI
3/8"	A-20K6MC-66K4MC 20,000 PSI	A-20K6MC-66K6MC 20,000 PSI	A-20K6MC-66K9MC 20,000 PSI	A-20K6MC-66K12MC 20,000 PSI
9/16"	A-20K9MC-66K4MC 20,000 PSI	A-20K9MC-66K6MC 20,000 PSI	A-20K9MC-66K9MC 20,000 PSI	A-20K9MC-66K12MC 20,000 PSI
3/4"	A-20K12MC-66K4MC 20,000 PSI	A-20K12MC-66K6MC 20,000 PSI	A-20K12MC-66K9MC 20,000 PSI	A-20K12MC-66K12MC 20,000 PSI
1"	A-20K16MC-66K4MC 20,000 PSI	A-20K16MC-66K6MC 20,000 PSI	A-20K16MC-66K9MC 20,000 PSI	A-20K16MC-66K12MC 20,000 PSI
1-1/2"	A-15K24MC-66K4MC 15,000 PSI	A-15K24MC-66K6MC 15,000 PSI	A-15K24MC-66K9MC 15,000 PSI	A-15K24MC-66K12MC 15,000 PSI

HP Cone & Thread Male



1/4"	A-66K4MC 66,000 PSI	A-66K4MC-66K6MC 66,000 PSI	A-66K4MC-66K9MC 66,000 PSI	A-66K4MC-66K12MC 66,000 PSI
3/8"	A-66K4MC-66K6MC 66,000 PSI	A-66K6MC 66,000 PSI	A-66K6MC-66K9MC 66,000 PSI	A-66K6MC-66K12MC 66,000 PSI
9/16"	A-66K4MC-66K9MC 66,000 PSI	A-66K6MC-66K9MC 66,000 PSI	A-66K9MC 66,000 PSI	A-66K9MC-66K12MC 66,000 PSI
3/4"	A-66K4MC-66K12MC 66,000 PSI	A-66K6MC-66K12MC 66,000 PSI	A-66K9MC-66K12MC 66,000 PSI	A-66K12MC 66,000 PSI

UHP Cone & Thread Male



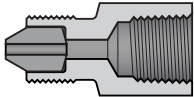
1/4"	A-66K4MC-100K4MC 66,000 PSI	A-66K6MC-100K4MC 66,000 PSI	A-66K9MC-100K4MC 66,000 PSI	A-66K12MC-100K4MC 66,000 PSI
3/8"	A-66K4MC-100K6MC 66,000 PSI	A-66K6MC-100K6MC 66,000 PSI	A-66K9MC-100K6MC 66,000 PSI	A-66K12MC-100K6MC 66,000 PSI
9/16"	A-66K4MC-100K9MC 66,000 PSI	A-66K6MC-100K9MC 66,000 PSI	A-66K9MC-100K9MC 66,000 PSI	A-66K12MC-100K9MC 66,000 PSI
3/4"	A-66K4MC-100K12MC 66,000 PSI	A-66K6MC-100K12MC 66,000 PSI	A-66K9MC-100K12MC 66,000 PSI	A-66K12MC-100K12MC 66,000 PSI



CONNECTORS

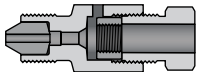
UHP Cone & Thread Male

NPT Female



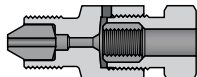
Size	1/4"	3/8"	9/16"	3/4"
1/8"	A-100K4MC-2NPTF 15,000 PSI	A-100K6MC-2NPTF 15,000 PSI	A-100K9MC-2NPTF 15,000 PSI	A-100K12MC-2NPTF 15,000 PSI
1/4"	A-100K4MC-4NPTF 15,000 PSI	A-100K6MC-4NPTF 15,000 PSI	A-100K9MC-4NPTF 15,000 PSI	A-100K12MC-4NPTF 15,000 PSI
3/8"	A-100K4MC-6NPTF 15,000 PSI	A-100K6MC-6NPTF 15,000 PSI	A-100K9MC-6NPTF 15,000 PSI	A-100K12MC-6NPTF 15,000 PSI
1/2"	A-100K4MC-8NPTF 15,000 PSI	A-100K6MC-8NPTF 15,000 PSI	A-100K9MC-8NPTF 15,000 PSI	A-100K12MC-8NPTF 15,000 PSI
3/4"	A-100K4MC-12NPTF 10,000 PSI	A-100K6MC-12NPTF 10,000 PSI	A-100K9MC-12NPTF 10,000 PSI	A-100K12MC-12NPTF 10,000 PSI
1"	A-100K4MC-16NPTF 10,000 PSI	A-100K6MC-16NPTF 10,000 PSI	A-100K9MC-16NPTF 10,000 PSI	A-100K12MC-16NPTF 10,000 PSI

MP Cone & Thread Female



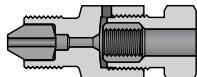
1/4"	AA-20K4F-100K4MC 20,000 PSI	AA-20K4F-100K6MC 20,000 PSI	AA-20K4F-100K9MC 20,000 PSI	AA-20K4F-100K12MC 20,000 PSI
3/8"	AA-20K6F-100K4MC 20,000 PSI	AA-20K6F-100K6MC 20,000 PSI	AA-20K6F-100K9MC 20,000 PSI	AA-20K6F-100K12MC 20,000 PSI
9/16"	AA-20K9F-100K4MC 20,000 PSI	AA-20K9F-100K6MC 20,000 PSI	AA-20K9F-100K9MC 20,000 PSI	AA-20K9F-100K12MC 20,000 PSI
3/4"	AA-20K12F-100K4MC 20,000 PSI	AA-20K12F-100K6MC 20,000 PSI	AA-20K12F-100K9MC 20,000 PSI	AA-20K12F-100K12MC 20,000 PSI
1"	AA-20K16F-100K4MC 20,000 PSI	AA-20K16F-100K6MC 20,000 PSI	AA-20K16F-100K9MC 20,000 PSI	AA-20K16F-100K12MC 20,000 PSI
1-1/2"	AA-15K24F-100K4MC 15,000 PSI	AA-15K24F-100K6MC 15,000 PSI	AA-15K24F-100K9MC 15,000 PSI	AA-15K24F-100K12MC 15,000 PSI

HP Cone & Thread Female



1/4"	AA-66K4F-100K4MC 66,000 PSI	AA-66K4F-100K6MC 66,000 PSI	AA-66K4F-100K9MC 66,000 PSI	AA-66K4F-100K12MC 66,000 PSI
3/8"	AA-66K6F-100K4MC 66,000 PSI	AA-66K6F-100K6MC 66,000 PSI	AA-66K6F-100K9MC 66,000 PSI	AA-66K6F-100K12MC 66,000 PSI
9/16"	AA-66K9F-100K4MC 66,000 PSI	AA-66K9F-100K6MC 66,000 PSI	AA-66K9F-100K9MC 66,000 PSI	AA-66K9F-100K12MC 66,000 PSI
3/4"	AA-66K12F-100K4MC 66,000 PSI	AA-66K12F-100K6MC 66,000 PSI	AA-66K12F-100K9MC 66,000 PSI	AA-66K12F-100K12MC 66,000 PSI

UHP Cone & Thread Female



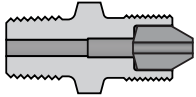
1/4"	AA-100K4F-100K4MC 100,000 PSI	AA-100K4F-100K6MC 100,000 PSI	AA-100K4F-100K9MC 100,000 PSI	AA-100K4F-100K12MC 100,000 PSI
3/8"	AA-100K6F-100K4MC 100,000 PSI	AA-100K6F-100K6MC 100,000 PSI	AA-100K6F-100K9MC 100,000 PSI	AA-100K6F-100K12MC 100,000 PSI
9/16"	AA-100K9F-100K4MC 100,000 PSI	AA-100K9F-100K6MC 100,000 PSI	AA-100K9F-100K9MC 100,000 PSI	AA-100K9F-100K12MC 100,000 PSI
3/4"	AA-100K12F-100K4MC 100,000 PSI	AA-100K12F-100K6MC 100,000 PSI	AA-100K12F-100K9MC 100,000 PSI	AA-100K12F-100K12MC 100,000 PSI



CONNECTORS

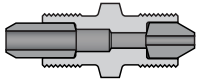
UHP Cone & Thread Male

NPT Male



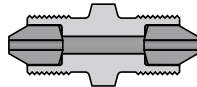
Size	1/4"	3/8"	9/16"	3/4"
1/8"	A-100K4MC-2NPTM 15,000 PSI	A-100K6MC-2NPTM 15,000 PSI	A-100K9MC-2NPTM 15,000 PSI	A-100K12MC-2NPTM 15,000 PSI
1/4"	A-100K4MC-4NPTM 15,000 PSI	A-100K6MC-4NPTM 15,000 PSI	A-100K9MC-4NPTM 15,000 PSI	A-100K12MC-4NPTM 15,000 PSI
3/8"	A-100K4MC-6NPTM 15,000 PSI	A-100K6MC-6NPTM 15,000 PSI	A-100K9MC-6NPTM 15,000 PSI	A-100K12MC-6NPTM 15,000 PSI
1/2"	A-100K4MC-8NPTM 15,000 PSI	A-100K6MC-8NPTM 15,000 PSI	A-100K9MC-8NPTM 15,000 PSI	A-100K12MC-8NPTM 15,000 PSI
3/4"	A-100K4MC-12NPTM 10,000 PSI	A-100K6MC-12NPTM 10,000 PSI	A-100K9MC-12NPTM 10,000 PSI	A-100K12MC-12NPTM 10,000 PSI
1"	A-100K4MC-16NPTM 10,000 PSI	A-100K6MC-16NPTM 10,000 PSI	A-100K9MC-16NPTM 10,000 PSI	A-100K12MC-16NPTM 10,000 PSI

MP Cone & Thread Male



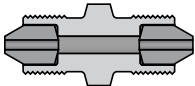
1/4"	A-20K4M-100K4MC 20,000 PSI	A-20K4M-100K6MC 20,000 PSI	A-20K4M-100K9MC 20,000 PSI	A-20K4M-100K12MC 20,000 PSI
3/8"	A-20K6MC-100K4MC 20,000 PSI	A-20K6MC-100K6MC 20,000 PSI	A-20K6MC-100K9MC 20,000 PSI	A-20K6MC-100K12MC 20,000 PSI
9/16"	A-20K9MC-100K4MC 20,000 PSI	A-20K9MC-100K6MC 20,000 PSI	A-20K9MC-100K9MC 20,000 PSI	A-20K9MC-100K12MC 20,000 PSI
3/4"	A-20K12MC-100K4MC 20,000 PSI	A-20K12MC-100K6MC 20,000 PSI	A-20K12MC-100K9MC 20,000 PSI	A-20K12MC-100K12MC 20,000 PSI
1"	A-20K16MC-100K4MC 20,000 PSI	A-20K16MC-100K6MC 20,000 PSI	A-20K16MC-100K9MC 20,000 PSI	A-20K16MC-100K12MC 20,000 PSI
1-1/2"	A-15K24MC-100K4MC 15,000 PSI	A-15K24MC-100K6MC 15,000 PSI	A-15K24MC-100K9MC 15,000 PSI	A-15K24MC-100K12MC 15,000 PSI

HP Cone & Thread Male



1/4"	A-66K4MC-100K4MC 66,000 PSI	A-66K4MC-100K6MC 66,000 PSI	A-66K4MC-100K9MC 66,000 PSI	A-66K4MC-100K12MC 66,000 PSI
3/8"	A-66K6MC-100K4MC 66,000 PSI	A-66K6MC-100K6MC 66,000 PSI	A-66K6MC-100K9MC 66,000 PSI	A-66K6MC-100K12MC 66,000 PSI
9/16"	A-66K9MC-100K4MC 66,000 PSI	A-66K9MC-100K6MC 66,000 PSI	A-66K9MC-100K9MC 66,000 PSI	A-66K9MC-100K12MC 66,000 PSI
3/4"	A-66K12MC-100K4MC 66,000 PSI	A-66K12MC-100K6MC 66,000 PSI	A-66K12MC-100K9MC 66,000 PSI	A-66K12MC-100K12MC 66,000 PSI

UHP Cone & Thread Male



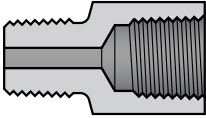
1/4"	A-100K4MC 100,000 PSI	A-100K6MC-100K4MC 100,000 PSI	A-100K9MC-100K4MC 100,000 PSI	A-100K12MC-100K4MC 100,000 PSI
3/8"	A-100K4MC-100K6MC 100,000 PSI	A-100K6MC 100,000 PSI	A-100K9MC-100K6MC 100,000 PSI	A-100K12MC-100K6MC 100,000 PSI
9/16"	A-100K4MC-100K9MC 100,000 PSI	A-100K6MC-100K9MC 100,000 PSI	A-100K9MC 100,000 PSI	A-100K12MC-100K9MC 100,000 PSI
3/4"	A-100K4MC-100K12MC 100,000 PSI	A-100K6MC-100K12MC 100,000 PSI	A-100K9MC-100K12MC 100,000 PSI	A-100K12MC 100,000 PSI



CONNECTORS

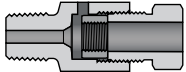
NPT Male

NPT Female



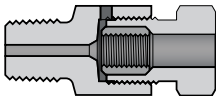
Size	1/8"	1/4"	3/8"	1/2"	3/4"	1"
1/8"	A-2NPTF-2NPTM 15,000 PSI	A-2NPTF-4NPTM 15,000 PSI	A-2NPTF-6NPTM 15,000 PSI	A-2NPTF-8NPTM 15,000 PSI	A-2NPTF-12NPTM 10,000 PSI	A-2NPTF-16NPTM 10,000 PSI
1/4"	A-4NPTF-2NPTM 15,000 PSI	A-4NPTF-4NPTM 15,000 PSI	A-4NPTF-6NPTM 15,000 PSI	A-4NPTF-8NPTM 15,000 PSI	A-4NPTF-12NPTM 10,000 PSI	A-4NPTF-16NPTM 10,000 PSI
3/8"	A-6NPTF-2NPTM 15,000 PSI	A-6NPTF-4NPTM 15,000 PSI	A-6NPTF-6NPTM 15,000 PSI	A-6NPTF-8NPTM 15,000 PSI	A-6NPTF-12NPTM 10,000 PSI	A-6NPTF-16NPTM 10,000 PSI
1/2"	A-8NPTF-2NPTM 15,000 PSI	A-8NPTF-4NPTM 15,000 PSI	A-8NPTF-6NPTM 15,000 PSI	A-8NPTF-8NPTM 15,000 PSI	A-8NPTF-12NPTM 10,000 PSI	A-8NPTF-16NPTM 10,000 PSI
3/4"	A-12NPTF-2NPTM 10,000 PSI	A-12NPTF-4NPTM 10,000 PSI	A-12NPTF-6NPTM 10,000 PSI	A-12NPTF-8NPTM 10,000 PSI	A-12NPTF-12NPTM 10,000 PSI	A-12NPTF-16NPTM 10,000 PSI
1"	A-16NPTF-2NPTM 10,000 PSI	A-16NPTF-4NPTM 10,000 PSI	A-16NPTF-6NPTM 10,000 PSI	A-16NPTF-8NPTM 10,000 PSI	A-16NPTF-12NPTM 10,000 PSI	A-16NPTF-16NPTM 10,000 PSI

MP Cone & Thread Female



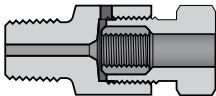
1/4"	AA-20K4F-2NPTM 15,000 PSI	AA-20K4F-4NPTM 15,000 PSI	AA-20K4F-6NPTM 15,000 PSI	AA-20K4F-8NPTM 15,000 PSI	AA-20K4F-12NPTM 10,000 PSI	AA-20K4F-16NPTM 10,000 PSI
3/8"	AA-20K6F-2NPTM 15,000 PSI	AA-20K6F-4NPTM 15,000 PSI	AA-20K6F-6NPTM 15,000 PSI	AA-20K6F-8NPTM 15,000 PSI	AA-20K6F-12NPTM 10,000 PSI	AA-20K6F-16NPTM 10,000 PSI
9/16"	AA-20K9F-2NPTM 15,000 PSI	AA-20K9F-4NPTM 15,000 PSI	AA-20K9F-6NPTM 15,000 PSI	AA-20K9F-8NPTM 15,000 PSI	AA-20K9F-12NPTM 10,000 PSI	AA-20K9F-16NPTM 10,000 PSI
3/4"	AA-20K12F-2NPTM 15,000 PSI	AA-20K12F-4NPTM 15,000 PSI	AA-20K12F-6NPTM 15,000 PSI	AA-20K12F-8NPTM 15,000 PSI	AA-20K12F-12NPTM 10,000 PSI	AA-20K12F-16NPTM 10,000 PSI
1"	AA-20K16F-2NPTM 15,000 PSI	AA-20K16F-4NPTM 15,000 PSI	AA-20K16F-6NPTM 15,000 PSI	AA-20K16F-8NPTM 15,000 PSI	AA-20K16F-12NPTM 10,000 PSI	AA-20K16F-16NPTM 10,000 PSI
1-1/2"	AA-15K24F-2NPTM 15,000 PSI	AA-15K24F-4NPTM 15,000 PSI	AA-15K24F-6NPTM 15,000 PSI	AA-15K24F-8NPTM 15,000 PSI	AA-15K24F-12NPTM 10,000 PSI	AA-15K24F-16NPTM 10,000 PSI

HP Cone & Thread Female



1/4"	AA-66K4F-2NPTM 15,000 PSI	AA-66K4F-4NPTM 15,000 PSI	AA-66K4F-6NPTM 15,000 PSI	AA-66K4F-8NPTM 15,000 PSI	AA-66K4F-12NPTM 10,000 PSI	AA-66K4F-16NPTM 10,000 PSI
3/8"	AA-66K6F-2NPTM 15,000 PSI	AA-66K6F-4NPTM 15,000 PSI	AA-66K6F-6NPTM 15,000 PSI	AA-66K6F-8NPTM 15,000 PSI	AA-66K6F-12NPTM 10,000 PSI	AA-66K6F-16NPTM 10,000 PSI
9/16"	AA-66K9F-2NPTM 15,000 PSI	AA-66K9F-4NPTM 15,000 PSI	AA-66K9F-6NPTM 15,000 PSI	AA-66K9F-8NPTM 15,000 PSI	AA-66K9F-12NPTM 10,000 PSI	AA-66K9F-16NPTM 10,000 PSI
3/4"	AA-66K12F-2NPTM 15,000 PSI	AA-66K12F-4NPTM 15,000 PSI	AA-66K12F-6NPTM 15,000 PSI	AA-66K12F-8NPTM 15,000 PSI	AA-66K12F-12NPTM 10,000 PSI	AA-66K12F-16NPTM 10,000 PSI

UHP Cone & Thread Female



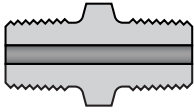
1/4"	AA-100K4F-2NPTM 15,000 PSI	AA-100K4F-4NPTM 15,000 PSI	AA-100K4F-6NPTM 15,000 PSI	AA-100K4F-8NPTM 15,000 PSI	AA-100K4F-12NPTM 10,000 PSI	AA-100K4F-16NPTM 10,000 PSI
3/8"	AA-100K6F-2NPTM 15,000 PSI	AA-100K6F-4NPTM 15,000 PSI	AA-100K6F-6NPTM 15,000 PSI	AA-100K6F-8NPTM 15,000 PSI	AA-100K6F-12NPTM 10,000 PSI	AA-100K6F-16NPTM 10,000 PSI
9/16"	AA-100K9F-2NPTM 15,000 PSI	AA-100K9F-4NPTM 15,000 PSI	AA-100K9F-6NPTM 15,000 PSI	AA-100K9F-8NPTM 15,000 PSI	AA-100K9F-12NPTM 10,000 PSI	AA-100K9F-16NPTM 10,000 PSI
3/4"	AA-100K12F-2NPTM 15,000 PSI	AA-100K12F-4NPTM 15,000 PSI	AA-100K12F-6NPTM 15,000 PSI	AA-100K12F-8NPTM 15,000 PSI	AA-100K12F-12NPTM 10,000 PSI	AA-100K12F-16NPTM 10,000 PSI



CONNECTORS

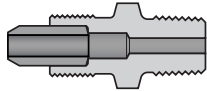
NPT Male

NPT Male



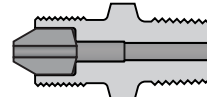
Size	1/8"	1/4"	3/8"	1/2"	3/4"	1"
1/8"	A-2NPTM 15,000 PSI	A-2NPTM-4NPTM 15,000 PSI	A-2NPTM-6NPTM 15,000 PSI	A-2NPTM-8NPTM 15,000 PSI	A-2NPTM-12NPTM 10,000 PSI	A-2NPTM-16NPTM 10,000 PSI
1/4"	A-2NPTM-4NPTM 15,000 PSI	A-4NPTM 15,000 PSI	A-4NPTM-6NPTM 15,000 PSI	A-4NPTM-8NPTM 15,000 PSI	A-4NPTM-12NPTM 10,000 PSI	A-4NPTM-16NPTM 10,000 PSI
3/8"	A-2NPTM-6NPTM 15,000 PSI	A-4NPTM-6NPTM 15,000 PSI	A-6NPTM 15,000 PSI	A-6NPTM-8NPTM 15,000 PSI	A-6NPTM-12NPTM 10,000 PSI	A-6NPTM-16NPTM 10,000 PSI
1/2"	A-2NPTM-8NPTM 15,000 PSI	A-4NPTM-8NPTM 15,000 PSI	A-6NPTM-8NPTM 15,000 PSI	A-8NPTM 15,000 PSI	A-8NPTM-12NPTM 10,000 PSI	A-8NPTM-16NPTM 10,000 PSI
3/4"	A-2NPTM-12NPTM 10,000 PSI	A-4NPTM-12NPTM 10,000 PSI	A-6NPTM-12NPTM 10,000 PSI	A-8NPTM-12NPTM 10,000 PSI	A-12NPTM 10,000 PSI	A-12NPTM-16NPTM 10,000 PSI
1"	A-2NPTM-16NPTM 10,000 PSI	A-4NPTM-16NPTM 10,000 PSI	A-8NPTM-16NPTM 10,000 PSI	A-8NPTM-16NPTM 10,000 PSI	A-12NPTM-16NPTM 10,000 PSI	A-16NPTM 10,000 PSI

MP Cone & Thread Male



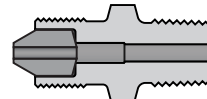
1/4"	A-20K4M-2NPTM 15,000 PSI	A-20K4M-4NPTM 15,000 PSI	A-20K4M-6NPTM 15,000 PSI	A-20K4M-8NPTM 15,000 PSI	A-20K4M-12NPTM 10,000 PSI	A-20K4M-16NPTM 10,000 PSI
3/8"	A-20K6MC-2NPTM 15,000 PSI	A-20K6MC-4NPTM 15,000 PSI	A-20K6MC-6NPTM 15,000 PSI	A-20K6MC-8NPTM 15,000 PSI	A-20K6MC-12NPTM 10,000 PSI	A-20K6MC-16NPTM 10,000 PSI
9/16"	A-20K9MC-2NPTM 15,000 PSI	A-20K9MC-4NPTM 15,000 PSI	A-20K9MC-6NPTM 15,000 PSI	A-20K9MC-8NPTM 15,000 PSI	A-20K9MC-12NPTM 10,000 PSI	A-20K9MC-16NPTM 10,000 PSI
3/4"	A-20K12MC-2NPTM 15,000 PSI	A-20K12MC-4NPTM 15,000 PSI	A-20K12MC-6NPTM 15,000 PSI	A-20K12MC-8NPTM 15,000 PSI	A-20K12MC-12NPTM 10,000 PSI	A-20K12MC-16NPTM 10,000 PSI
1"	A-20K16MC-2NPTM 15,000 PSI	A-20K16MC-4NPTM 15,000 PSI	A-20K16MC-6NPTM 15,000 PSI	A-20K16MC-8NPTM 15,000 PSI	A-20K16MC-12NPTM 10,000 PSI	A-20K16MC-16NPTM 10,000 PSI
1-1/2"	A-15K24MC-2NPTM 15,000 PSI	A-15K24MC-4NPTM 15,000 PSI	A-15K24MC-6NPTM 15,000 PSI	A-15K24MC-8NPTM 15,000 PSI	A-15K24MC-12NPTM 10,000 PSI	A-15K24MC-16NPTM 10,000 PSI

HP Cone & Thread Male



1/4"	A-66K4MC-2NPTM 15,000 PSI	A-66K4MC-4NPTM 15,000 PSI	A-66K4MC-6NPTM 15,000 PSI	A-66K4MC-8NPTM 15,000 PSI	A-66K4MC-12NPTM 10,000 PSI	A-66K4MC-16NPTM 10,000 PSI
3/8"	A-66K6MC-2NPTM 15,000 PSI	A-66K6MC-4NPTM 15,000 PSI	A-66K6MC-6NPTM 15,000 PSI	A-66K6MC-8NPTM 15,000 PSI	A-66K6MC-12NPTM 10,000 PSI	A-66K6MC-16NPTM 10,000 PSI
9/16"	A-66K9MC-2NPTM 15,000 PSI	A-66K9MC-4NPTM 15,000 PSI	A-66K9MC-6NPTM 15,000 PSI	A-66K9MC-8NPTM 15,000 PSI	A-66K9MC-12NPTM 10,000 PSI	A-66K9MC-16NPTM 10,000 PSI
3/4"	A-66K12MC-2NPTM 15,000 PSI	A-66K12MC-4NPTM 15,000 PSI	A-66K12MC-6NPTM 15,000 PSI	A-66K12MC-8NPTM 15,000 PSI	A-66K12MC-12NPTM 10,000 PSI	A-66K12MC-16NPTM 10,000 PSI

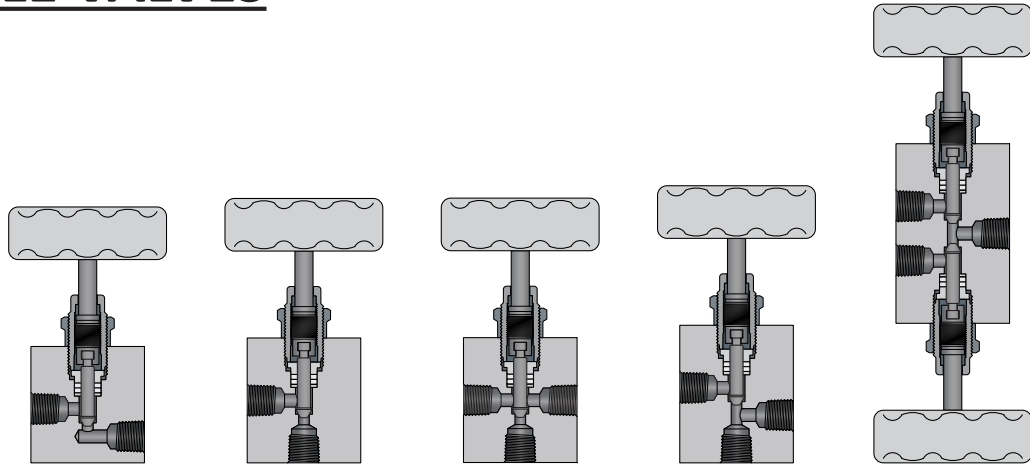
UHP Cone & Thread Male



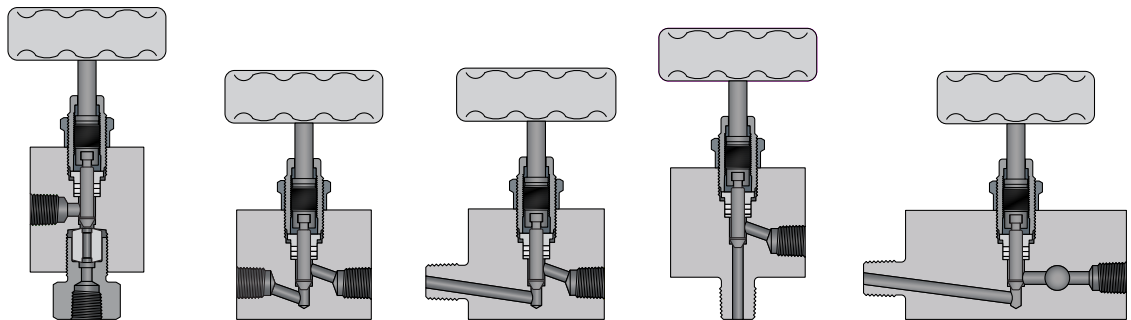
1/4"	A-100K4MC-2NPTM 15,000 PSI	A-100K4MC-4NPTM 15,000 PSI	A-100K4MC-6NPTM 15,000 PSI	A-100K4MC-8NPTM 15,000 PSI	A-100K4MC-12NPTM 10,000 PSI	A-100K4MC-16NPTM 10,000 PSI
3/8"	A-100K6MC-2NPTM 15,000 PSI	A-100K6MC-4NPTM 15,000 PSI	A-100K6MC-6NPTM 15,000 PSI	A-100K6MC-8NPTM 15,000 PSI	A-100K6MC-12NPTM 10,000 PSI	A-100K6MC-16NPTM 10,000 PSI
9/16"	A-100K9MC-2NPTM 15,000 PSI	A-100K9MC-4NPTM 15,000 PSI	A-100K9MC-6NPTM 15,000 PSI	A-100K9MC-8NPTM 15,000 PSI	A-100K9MC-12NPTM 10,000 PSI	A-100K9MC-16NPTM 10,000 PSI
3/4"	A-100K12MC-2NPTM 15,000 PSI	A-100K12MC-4NPTM 15,000 PSI	A-100K12MC-6NPTM 15,000 PSI	A-100K12MC-8NPTM 15,000 PSI	A-100K12MC-12NPTM 10,000 PSI	A-100K12MC-16NPTM 10,000 PSI



PIPE NEEDLE VALVES



Pipe Size	MAWP PSI (bar)	2-way Straight	2-way Angle	3-way 1 Inlet Port	3-way 2 Inlet Ports	2-stem Manifold
1/8"	15,000 (1030)	VT-2NPT-2S1	VT-2NPT-2A1	VT-2NPT-311	VT-2NPT-321	VT-2NPT-331
1/4"	15,000 (1030)	VT-4NPT-2S1	VT-4NPT-2A1	VT-4NPT-311	VT-4NPT-321	VT-4NPT-331
3/8"	15,000 (1030)	VT-6NPT-2S1	VT-6NPT-2A1	VT-6NPT-311	VT-6NPT-321	VT-6NPT-331
1/2"	15,000 (1030)	VT-8NPT-2S1	VT-8NPT-2A1	VT-8NPT-311	VT-8NPT-321	VT-8NPT-331
3/4"	10,000 (690)	VT-12NPT-2S1	V-12NPT-2A1	V-12NPT-311	V-12NPT-321	V-12NPT-331
1"	10,000 (690)	VT-16NPT-2S1	V-16NPT-2A1	V-16NPT-311	V-16NPT-321	V-16NPT-331



Pipe Size	MAWP PSI (bar)	Replaceable Seat	2-way Inline ports	Inline ports Male x Female	2-way Angle Male x Female	2-way Gauge Male x Female
1/8"	15,000 (1030)	VT-2NPT-2R1	VT-2NPT-FS1	VT-2NPT-MS1	VT-2NPT-MA1	VT-2NPT-GA1
1/4"	15,000 (1030)	VT-4NPT-2R1	VT-4NPT-FS1	VT-4NPT-MS1	VT-4NPT-MA1	VT-4NPT-GA1
3/8"	15,000 (1030)	VT-6NPT-2R1	VT-6NPT-FS1	VT-6NPT-MS1	VT-6NPT-MA1	VT-6NPT-GA1
1/2"	15,000 (1030)	VT-8NPT-2R1	VT-8NPT-FS1	VT-8NPT-MS1	VT-8NPT-MA1	VT-8NPT-GA1
3/4"	10,000 (690)	V-12NPT-2R1	V-12NPT-FS1	V-12NPT-MS1	V-12NPT-MA1	V-12NPT-GA1
1"	10,000 (690)	V-16NPT-2R1	V-16NPT-FS1	V-16NPT-MS1	V-16NPT-MA1	V-16NPT-GA1



Needle Valve Part Number Breakdown

VALVE STYLE	CONNECTION SIZE	BODY STYLE	STEM TIP	ACTUATOR
VT	4	2S	1	1
-V Non-rotating Stem	-4NPT 1/4"	-2S Straight thru	-1 Vee	-Blank Hand Valve
-VT Two-piece Stem	-6NPT 3/8"	-2A Angle	-2 Metering	-1 Actuated valve less actuator
	-8NPT 1/2"	-31 Three-way, one on pressure	-3 Regulating	-2 Air-to-close 5"
	-12NPT 3/4"	-32 Three-way, two on pressure		-3 Air-to-open 5"
	-16NPT 1"	-33 Two-stem Manifold		-4 Air-to-close 8"
		-2R Replaceable Seat		-5 Air-to-open 8"
		-FS 2-Way Inline Ports		-6 Double-acting 5"
		-MS 2-Way Inline, male x female		-7 Double Acting 8"
		-MA 2-Way Angle, male x female		-8 HD Double Acting
		-GA 2-Way Gauge, male x female		-9 Double-Acting Hydraulic

VT-4NPT-MS1

Needle valve, 1/4" NPT connections, Inline
Ports Male x Female, Vee stem

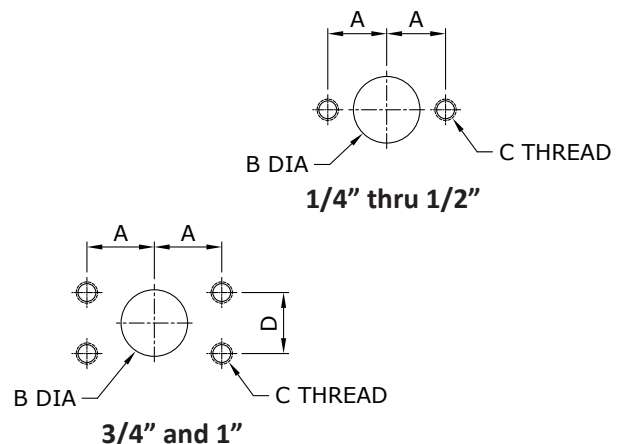
Needle Valve Options

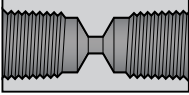
- GR Grafoil packing for service to 800°F (426°C)
- TFE Virgin Teflon packing for service to 450°F (232°C)
- C6WP 316 wetted parts
- STS Stellite tipped stem
- SRS Stellite replaceable seat (Replaceable seat valves, body style 6, only)
- GAV Anti-vibration glands instead of standard gland
- SOG Compliant with NACE MR-01-75 for sour gas service
- HT Extended bonnet, graphite packing and other materials for service temperatures to 1200°F (648°C)
- HTF Extended, finned bonnet, graphite packing and other materials for service temperatures to 1200°F (648°C)
- LT Extended bonnet, teflon packing and other materials for service temperatures to -423°F (-251°C)
- LTF Extended, finned bonnet, teflon packing and other materials for service temperatures to -423°F (-251°C)

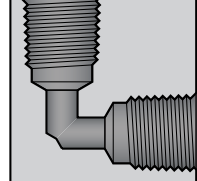
Dimensions for Panel Mounting

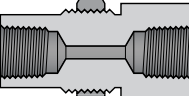
All needle valves include a panel mounting nut.

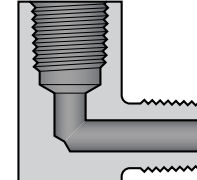
Valve	A	B	C	D	Thread Depth
1/8"	0.62"	0.78"	#10-24 UNC	---	0.38"
1/4"	(15.7)	(19.8)			(9.7)
3/8"	0.69"	0.84"	1/4"-20 UNC	---	0.38"
1/2"	(17.5)	(21.3)			(9.7)
3/4"	1.62"	1.41"	1/2"-20 UNF	0.88"	0.75"
1"	(41.1)	(35.8)		(22.4)	(19.1)

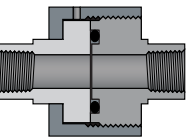


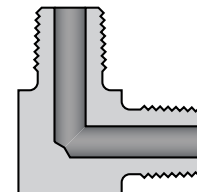
COUPLING	Pipe Size	MAWP PSI (bar)	Catalog Number
	1/8"	15,000 (1030)	C-2NPT
	1/4"	15,000 (1030)	C-4NPT
	3/8"	15,000 (1030)	C-6NPT
	1/2"	15,000 (1030)	C-8NPT
	3/4"	10,000 (690)	C-12NPT
	1"	10,000 (690)	C-16NPT

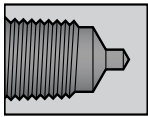
FEMALE ELBOW	Pipe Size	MAWP PSI (bar)	Catalog Number
	1/8"	15,000 (1030)	E-2NPT
	1/4"	15,000 (1030)	E-4NPT
	3/8"	15,000 (1030)	E-6NPT
	1/2"	15,000 (1030)	E-8NPT
	3/4"	10,000 (690)	E-12NPT
	1"	10,000 (690)	E-16NPT

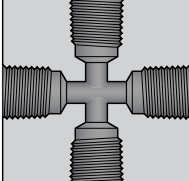
BULKHEAD	Pipe Size	MAWP PSI (bar)	Catalog Number
	1/8"	15,000 (1030)	B-2NPT
	1/4"	15,000 (1030)	B-4NPT
	3/8"	15,000 (1030)	B-6NPT
	1/2"	15,000 (1030)	B-8NPT
	3/4"	10,000 (690)	B-12NPT
	1"	10,000 (690)	B-16NPT

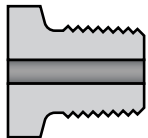
STREET ELBOW	Pipe Size	MAWP PSI (bar)	Catalog Number
	1/8"	15,000 (1030)	ES-2NPT
	1/4"	15,000 (1030)	ES-4NPT
	3/8"	15,000 (1030)	ES-6NPT
	1/2"	15,000 (1030)	ES-8NPT
	3/4"	10,000 (690)	ES-12NPT
	1"	10,000 (690)	ES-16NPT

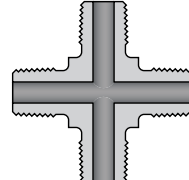
UNION	Pipe Size	MAWP PSI (bar)	Catalog Number
	1/8"	15,000 (1030)	UC-2NPT
	1/4"	15,000 (1030)	UC-4NPT
	3/8"	15,000 (1030)	UC-6NPT
	1/2"	15,000 (1030)	UC-8NPT
	3/4"	10,000 (690)	UC-12NPT
	1"	10,000 (690)	UC-16NPT

MALE ELBOW	Pipe Size	MAWP PSI (bar)	Catalog Number
	1/8"	15,000 (1030)	EM-2NPT
	1/4"	15,000 (1030)	EM-4NPT
	3/8"	15,000 (1030)	EM-6NPT
	1/2"	15,000 (1030)	EM-8NPT
	3/4"	10,000 (690)	EM-12NPT
	1"	10,000 (690)	EM-16NPT

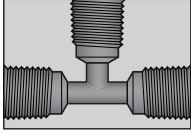
CAP	Pipe Size	MAWP PSI (bar)	Catalog Number
	1/8"	15,000 (1030)	CP-2NPT
	1/4"	15,000 (1030)	CP-4NPT
	3/8"	15,000 (1030)	CP-6NPT
	1/2"	15,000 (1030)	CP-8NPT
	3/4"	10,000 (690)	CP-12NPT
	1"	10,000 (690)	CP-16NPT

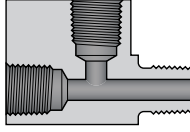
FEMALE CROSS	Pipe Size	MAWP PSI (bar)	Catalog Number
	1/8"	15,000 (1030)	X-2NPT
	1/4"	15,000 (1030)	X-4NPT
	3/8"	15,000 (1030)	X-6NPT
	1/2"	15,000 (1030)	X-8NPT
	3/4"	10,000 (690)	X-12NPT
	1"	10,000 (690)	X-16NPT

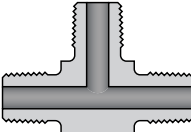
PLUG	Pipe Size	MAWP PSI (bar)	Catalog Number
	1/8"	15,000 (1030)	PLG-2NPT
	1/4"	15,000 (1030)	PLG-4NPT
	3/8"	15,000 (1030)	PLG-6NPT
	1/2"	15,000 (1030)	PLG-8NPT
	3/4"	10,000 (690)	PLG-12NPT
	1"	10,000 (690)	PLG-16NPT

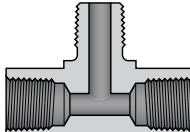
MALE CROSS	Pipe Size	MAWP PSI (bar)	Catalog Number
	1/8"	15,000 (1030)	XM-2NPT
	1/4"	15,000 (1030)	XM-4NPT
	3/8"	15,000 (1030)	XM-6NPT
	1/2"	15,000 (1030)	XM-8NPT
	3/4"	10,000 (690)	XM-12NPT
	1"	10,000 (690)	XM-16NPT

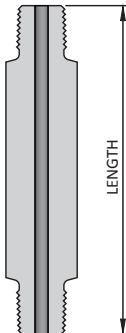


FEMALE TEE	Pipe Size	MAWP PSI (bar)	Catalog Number
	1/8"	15,000 (1030)	T-2NPT
	1/4"	15,000 (1030)	T-4NPT
	3/8"	15,000 (1030)	T-6NPT
	1/2"	15,000 (1030)	T-8NPT
	3/4"	10,000 (690)	T-12NPT
	1"	10,000 (690)	T-16NPT

MALE RUN TEE	Pipe Size	MAWP PSI (bar)	Catalog Number
	1/8"	15,000 (1030)	TR-2NPT
	1/4"	15,000 (1030)	TR-4NPT
	3/8"	15,000 (1030)	TR-6NPT
	1/2"	15,000 (1030)	TR-8NPT
	3/4"	10,000 (690)	TR-12NPT
	1"	10,000 (690)	TR-16NPT

MALE TEE	Pipe Size	MAWP PSI (bar)	Catalog Number
	1/8"	15,000 (1030)	TM-2NPT
	1/4"	15,000 (1030)	TM-4NPT
	3/8"	15,000 (1030)	TM-6NPT
	1/2"	15,000 (1030)	TM-8NPT
	3/4"	10,000 (690)	TM-12NPT
	1"	10,000 (690)	TM-16NPT

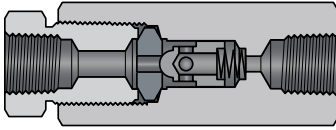
MALE BRANCH TEE	Pipe Size	MAWP PSI (bar)	Catalog Number
	1/8"	15,000 (1030)	TB-2NPT
	1/4"	15,000 (1030)	TB-4NPT
	3/8"	15,000 (1030)	TB-6NPT
	1/2"	15,000 (1030)	TB-8NPT
	3/4"	10,000 (690)	TB-12NPT
	1"	10,000 (690)	TB-16NPT

NIPPLE	Pipe Size	MAWP PSI (bar)	Overall Length (L)		
			2.00" (50.8 mm)	3.00" (76.2 mm)	4.00" (102 mm)
	1/8"	15,000 (1030)	NPL-2NPT-200	NPL-2NPT-300	NPL-2NPT-400
	1/4"	15,000 (1030)	NPL-4NPT-200	NPL-4NPT-300	NPL-4NPT-400
	3/8"	15,000 (1030)	NPL-6NPT-200	NPL-6NPT-300	NPL-6NPT-400
	1/2"	15,000 (1030)	---	NPL-8NPT-300	NPL-8NPT-400
	3/4"	10,000 (690)	---	NPL-12NPT-300	NPL-12NPT-400
	1"	10,000 (690)	---	NPL-16NPT-300	NPL-16NPT-400

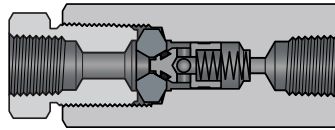
Pipe Size	MAWP PSI (bar)	Overall Length (L)			
		6.00" (152 mm)	8.00" (203 mm)	10.00" (254)	12.00" (305 mm)
1/8"	15,000 (1030)	NPL-2NPT-600	NPL-2NPT-800	NPL-2NPT-1000	NPL-2NPT-1200
1/4"	15,000 (1030)	NPL-4NPT-600	NPL-4NPT-800	NPL-4NPT-1000	NPL-4NPT-1200
3/8"	15,000 (1030)	NPL-6NPT-600	NPL-6NPT-800	NPL-6NPT-1000	NPL-6NPT-1200
1/2"	15,000 (1030)	NPL-8NPT-600	NPL-8NPT-800	NPL-8NPT-1000	NPL-8NPT-1200
3/4"	10,000 (690)	NPL-12NPT-600	NPL-12NPT-800	NPL-12NPT-1000	NPL-12NPT-1200
1"	10,000 (690)	NPL-16NPT-600	NPL-16NPT-800	NPL-16NPT-1000	NPL-16NPT-1200

Custom lengths available. Contact factory or your local representative.

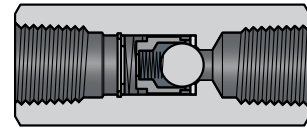




Ball Seat

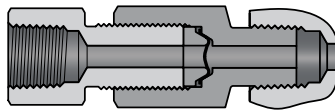


Soft Seat

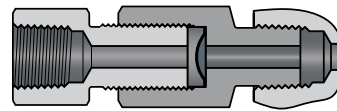


Dual Seal

CHECK VALVE	Pipe Size	MAWP PSI (bar)	Ball Seat	Soft Seat	Dual Seal
	1/8"	15,000 (1035)	CV-2NPT-BP	CV-2NPT-OP	CV-2NPT-DS
	1/4"	15,000 (1035)	CV-4NPT-BP	CV-4NPT-OP	CV-4NPT-DS
	3/8"	15,000 (1035)	CV-6NPT-BP	CV-6NPT-OP	CV-6NPT-DS
	1/2"	15,000 (1035)	CV-8NPT-BP	CV-8NPT-OP	CV-8NPT-DS
	3/4"	10,000 (690)	CV-12NPT-BP	CV-12NPT-OP	CV-12NPT-DS
	1"	10,000 (690)	CV-16NPT-BP	CV-16NPT-OP	CV-16NPT-DS

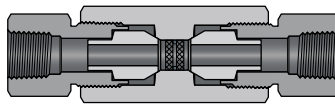


1/4" Angle Style

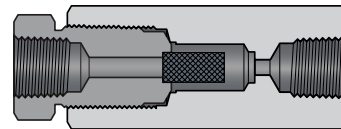


1/2" Flat Style

SAFETY HEAD	Pipe Size	MAWP PSI (bar)	1/4" Angle Style	1/2" Flat Style
	1/8"	15,000 (1035)	HD4-2NPT	HD8-2NPT
	1/4"	15,000 (1035)	HD4-4NPT	HD8-4NPT
	3/8"	15,000 (1035)	HD4-6NPT	HD8-6NPT
	1/2"	15,000 (1035)	HD4-8NPT	HD8-8NPT
	3/4"	10,000 (690)	HD4-12NPT	HD8-12NPT
	1"	10,000 (690)	HD4-16NPT	HD8-16NPT



Line



Cup

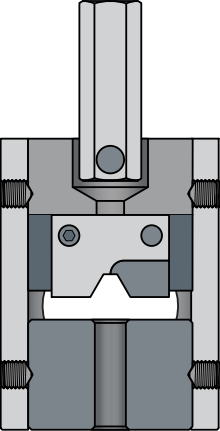
FILTER	Pipe Size	MAWP PSI (bar)	Line Filter	Cup Filter
	1/8"	15,000 (1030)	LF-2NPT-XX-XX	CF-2NPT-XX
	1/4"	15,000 (1030)	LF-4NPT-XX-XX	CF-4NPT-XX
	3/8"	15,000 (1030)	LF-6NPT-XX-XX	CF-6NPT-XX
	1/2"	15,000 (1030)	LF-8NPT-XX-XX	CF-8NPT-XX
	3/4"	10,000 (690)	LF-12NPT-XX-XX	CF-12NPT-XX
	1"	10,000 (690)	LF-16NPT-XX-XX	CF-16NPT-XX

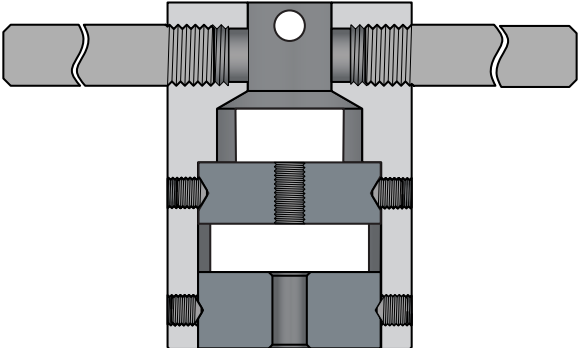
Complete catalog number by replacing -XX with required micron rating



CONING AND THREADING TOOLS

CTC's Coning & Threading Tools easily prepare tubing for installation. Purchase just the tools you need, or choose the full kit (TK1) which has everything needed to cone and thread 1/4", 3/8" & 9/16" tubing for both 20K and 66K.

CONING TOOL	Tube OD	For Use with Tubing	Coning Tool	Replacement Blade	Replacement Bushing
	1/4"	TU20-109-*	CT-20K4	BL-20K4	BC-20K4
		TU66-083-*	CT-66K4	BL-66K4	BC-66K4
		TU100-083-HP160	CT-66K4	BL-66K4	BC-66K4
	3/8"	TU20-203-*	CT-20K6	BL-20K6	BC-20K6
		TU66-125-*	CT-66K6	BL-66K6	BC-66K6
		TU100-125-HP160	CT-66K6	BL-66K6	BC-66K6
	9/16"	TU20-312-*	CT-20K9	BL-20K9	BC-20K9
		TU40-250-*	CT-40K9	BL-40K9	BC-40K9
		TU66-188-*	CT-66K9	BL-66K9	BC-66K9
	3/4"	TU20-438-*	CT-20K12	BL-20K12	BC-20K12
		TU66-250-*	CT-66K12	BL-66K12	BC-66K12
	1"	TU20-562-*	CT-20K16	BL-20K16	BC-20K16
	1-1/2"	TU10-937-*	CT-15K24	BL-15K24	BC-15K24

THREADING TOOL	Tube OD	Threading Tool	Threading Die	Replacement Bushing
	1/4"	TT-4	TD-4	BT-4
	3/8"	TT-6	TD-6	BT-6
	9/16"	TT-9	TD-9	BT-9
	3/4"	TT-12	TD-12	BT-12
	1"	TT-16	TD-16	BT-16
	1-1/2"	TT-24	TD-24	BT-24

Coning & Threading Kit - TK1

Tool Kit contains:

1 - CT-20K4	1 - BL-66K6	1 - TT-4
1 - BL-20K6	1 - BL-66K9	1 - TD-6
1 - BL-20K9	1 - BC-6	1 - TD-9
1 - BL-66K4	1 - BC-9	1 - BT-6
		1 - BT-9

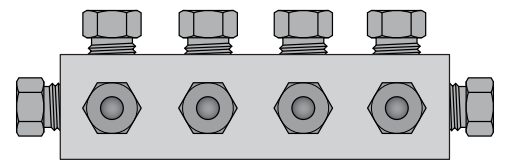
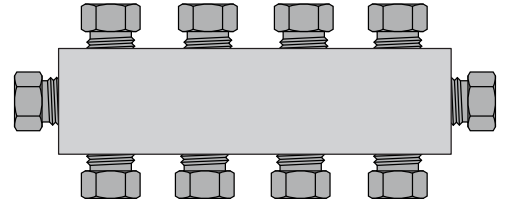
Plus lubricant and hex keys in a tool box.



Manifolds

Specialty pressure manifolds minimize space requirements and reduce installation time necessary to plumb a pressure system. Transitions in system line sizes and tubing pressure series can be accomplished through a specialty manifold. In addition, by reducing the number of components used in a system, manifolds reduce the number of potential leak points.

CTC can design and build pressure manifolds to meet specific installation, layout and pressure requirements. These manifolds are capable of withstanding pressure from vacuum to 66,000 PSI (4554 bar), and are available in a variety of material and sizes. Connections that can be incorporated include medium and high pressure cone-and-thread, NPT, SAE, and BSP. Safety heads for pressure relief can also be included. These manifolds are appropriate wherever pressure tubing systems are utilized.



Double Block & Bleed Valves

Double Block & Bleed Valves are designed for pressures to 30,000 PSI (2070 bar) and are available in a variety of material and sizes. These valves can be provided as ball valves, needle valves or a combination of both. CTC will custom design each valve to meet individual requirements.

