

**SCHEDULE 80 PIPE FITTINGS
AND WELD FITTINGS**



**Western Valve
& Fitting**

**(925-443-8500)
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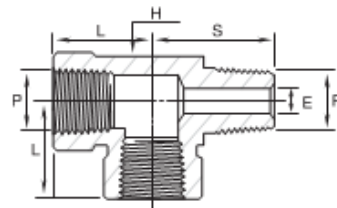
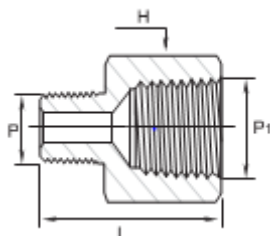


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10,000 PSI Pipe Fittings

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NPT/ISO Pipe Size	Stainless Steel 316				Brass				Carbon Steel			
	Male		Female		Male		Female		Male		Female	
	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig	bar	psig
1/8	689	10,000	420	6,100	337	4,900	207	3,000	689	10,000	420	6,100
1/4	558	8,100	434	6,300	275	4,000	214	3,200	558	8,100	434	6,300
3/8	524	7,600	345	5,000	262	3,800	172	2,500	524	7,600	345	5,000
1/2	517	7,500	324	4,700	255	3,700	158	2,300	517	7,500	324	4,700
3/4	496	7,200	303	4,400	248	3,600	152	2,200	496	7,200	303	4,400
1	365	5,300	296	4,300	172	2,500	145	2,100	365	5,300	296	4,300

Material Standards and Temperature Range

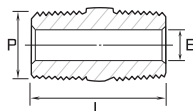
Materials	Bar Stock	Forgings	Maximum Temperature
Stainless Steel 316	ASTM A276 Type 316 / ASTM A479 Type 316	ASTM A182 F316	537°C (1000°F)
Brass	JIS H3250 C3604 / ASTM B453 C35300	JIS H3250 C3771 / ASTM B283 C37700	204 °C (400°F)
Carbon Steel	ASTM A108 / JIS G4051 S20C - S48C	ASTM A105 / JIS G4051 S20C - S48C	190 °C (375 °F)

Temperature De-rating Factors

Temp.	°F	100	200	300	400	500	600	700	800	900	1,000	1,200
	°C	38	93	149	204	260	316	371	427	482	538	649
Factor	Stainless Steel	1.00	1.00	1.00	0.97	0.90	0.85	0.82	0.80	0.78	0.77	0.49
	Brass	1.00	0.78	0.69	0.13							
	Carbon Steel	1.00	0.94	0.91	0.88							

Close Nipple

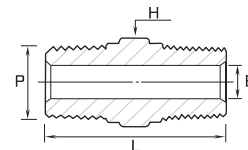
Male NPT both ends



Part Number	P NPT in.	L mm	E mm
CN-1/8	1/8	19.05	4.8
CN-1/4	1/4	28.4	7.1
CN-3/8	3/8	28.4	9.6
CN-1/2	1/2	38.1	11.9
CN-3/4	3/4	38.1	15.7
CN-1	1	47.8	22.4

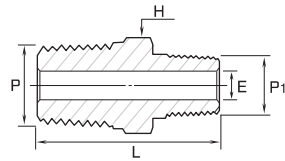
Hex Nipple

Male NPT both ends



Part Number	P NPT in.	L mm	E mm	H Hex mm
HN-1/8	1/8	25.65	4.8	11.1
HN-1/4	1/4	35.56	7.1	14.2
HN-3/8	3/8	36.32	9.6	17.4
HN-1/2	1/2	46.73	11.9	22.2
HN-3/4	3/4	46.73	15.7	26.9
HN-1	1	58.92	22.3	34.9

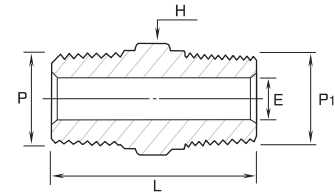
Hex Reducing Nipple



Male NPT to reduced male NPT

Part Number	P NPT in.	P1 Reduced NPT in.	L mm	E mm	H Hex mm
HRN-1/4	1/4	1/8	30.7	4.8	14.2
HRN-3/8	3/8	1/8	32.0	4.8	17.4
HRN-3/8	3/8	1/4	36.1	7.1	17.4
HRN-1/2	1/2	1/8	37.2	4.8	22.2
HRN-1/2	1/2	1/4	41.7	7.1	22.2
HRN-1/2	1/2	3/8	41.7	9.6	22.2
HRN-3/4	3/4	1/4	41.7	7.1	26.9
HRN-3/4	3/4	1/2	46.7	11.9	26.9
HRN-1	1	1/4	49.3	7.1	34.9
HRN-1	1	1/2	54.1	11.9	34.9

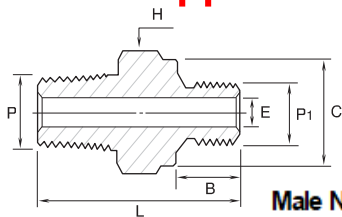
Hex Nipple



Male NPT to ISO tapered

Part Number	P NPT in.	P1 ISO Thread Size	L mm	E mm	H Hex mm
HNT-1/8	1/8	1/8-28 (7-1)	24.6	4.8	11.1
HNT-1/4	1/4	1/4-19 (7-1)	35.6	7.1	14.2
HNT-3/8	3/8	3/8-19 (7-1)	36.3	9.6	17.4
HNT-1/2	1/2	1/2-14 (7-1)	46.7	11.9	22.2
HNT-3/4	3/4	3/4-14 (7-1)	46.7	15.7	26.9
HNT-1	1	1-11 (7-1)	58.9	22.4	34.9

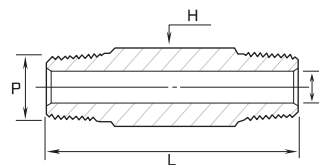
Hex Nipple



Male NPT to male ISO parallel

Part Number	P NPT in.	P1 ISO Thread Size	L mm	B mm	C mm	E mm	H Hex mm
HNP-1/8	1/8	1/8-28 (228-1)	27.4	7.1	13.7	4.1	14.2
HNP-1/4	1/4	1/4-19 (228-1)	36.8	11.2	17.8	5.8	19.05
HNP-3/8	3/8	3/8-19 (228-1)	37.6	11.2	21.8	7.9	22.2
HNP-1/2	1/2	1/2-14 (228-1)	45.0	14.2	26.1	11.9	26.9
HNP-3/4	3/4	3/4-14 (228-1)	49.0	15.7	31.5	15.7	33.3
HNP-1	1	1-11 (228-1)	56.9	18.3	38.9	19.8	41

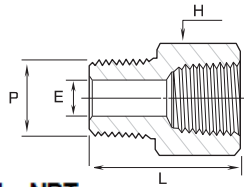
Hex Long Nipple



Male NPT both ends

Part Number	P NPT in.	L mm	E mm	H Hex mm
HLN-1/8	1/8	★	4.8	11.1
HLN-1/4	1/4	★	7.1	14.2
HLN-3/8	3/8	★	9.7	17.4
HLN-1/2	1/2	★	11.9	22.2
HLN-3/4	3/4	★	15.7	26.9
HLN-1	1	★	22.4	34.9

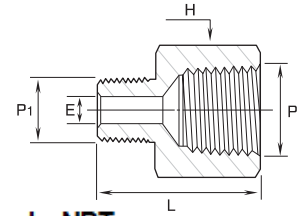
Adapter



Male NPT to equal female NPT

Part Number	P NPT in.	L mm	E mm	H Hex mm
A-1/8	1/8	27.94	4.8	14.2
A-1/4	1/4	35.56	7.1	19.05
A-3/8	3/8	38.35	9.6	22.2
A-1/2	1/2	49.27	11.9	26.9
A-3/4	3/4	51.3	15.7	33.3
A-1	1	57.91	22.3	41.2

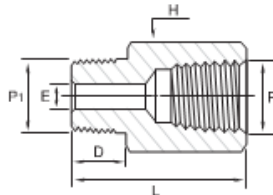
Reducing Adapter



Male NPT to larger female NPT

Part Number	P1 Male NPT in.	P Female NPT in.	L mm	E mm	H Hex mm
RA-1/8	1/8	1/4	31.5	4.8	19.05
RA-1/8	1/8	3/8	33.5	4.8	22.2
RA-1/4	1/4	3/8	37.8	7.1	22.2
RA-1/8	1/8	1/2	40.0	4.8	26.9
RA-1/4	1/4	1/2	44.5	7.1	26.9
RA-3/8	3/8	1/2	44.5	9.6	26.9
RA-1/4	1/4	3/4	45.7	7.1	33.3
RA-3/8	3/8	3/4	45.7	9.6	33.3
RA-1/2	1/2	3/4	51.1	11.9	33.3
RA-1/4	1/4	1	50.8	7.1	41.2
RA-1/2	1/2	1	54.9	11.9	41.2
RA-3/4	3/4	1	55.1	15.7	41.2

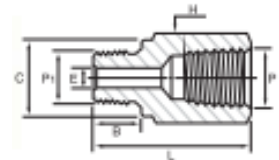
Adapter



Male ISO tapered to Female NPT

Part Number	P NPT in.	P1 ISO Thread Size	L mm	D mm	E mm	H Hex mm
AT-1/8	1/8	1/8-28 (7-1)	27.4	9.7	4.8	14.2
AT-1/4	1/4	1/4-19 (7-1)	35.8	14.2	7.1	19.05
AT-3/8	3/8	3/8-19 (7-1)	37.6	14.2	9.7	22.2
AT-1-2	1/2	1/2-14 (7-1)	49.0	19.1	11.9	26.9
AT-3/4	3/4	3/4-14 (7-1)	50.3	19.1	15.7	33.3
AT-1	1	1-11 (7-1)	58.0	23.9	22.3	41.2

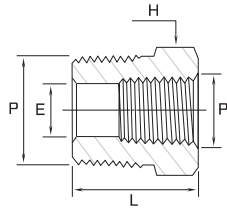
Adapter



Male ISO parallel to female NPT

Part Number	P NPT in.	P1 ISO Thread Size	L mm	B mm	C mm	E mm	H Hex mm
AP-1/8	1/8	1/8-28 (228-1)	24.9	7.1	13.7	4.1	14.2
AP-1/4	1/4	1/4-19 (228-1)	33.3	11.2	17.8	5.8	19.05
AP-3/8	3/8	3/8-19 (228-1)	37.8	11.2	21.8	7.9	22.2
AP-1/2	1/2	1/2-14 (228-1)	43.9	14.2	26.1	11.9	26.9
AP-3/4	3/4	3/4-14 (228-1)	50.8	15.7	31.5	15.7	33.3
AP-1	1	1-11 (228-1)	53.1	18.3	38.9	19.8	41.2

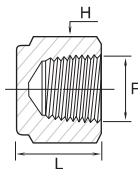
Reducing Hex Bushing



Male NPT to reduced female NPT

Part Number	P Male NPT in.	P1 Female NPT in.	L mm	E mm	H Hex mm	Working Pressure bar (psig)	
						SS316,C.Steel	Brass
RHB-1/4	1/4	1/8	26.7	7.1	14.2	447 (6400)	227 (3200)
RHB-3/8	3/8	1/8	21.8	8.5	17.4	633 (9100)	323 (4600)
RHB-3/8	3/8	1/4	30.0	9.6	19.05	454 (6500)	227 (3200)
RHB-1/2	1/2	1/8	27.4	8.5	22.2	840 (12100)	427 (6100)
RHB-1/2	1/2	1/4	27.4	11.7	22.2	571 (8200)	303 (4300)
RHB-1/2	1/2	3/8	35.6	11.9	22.2	365 (5200)	179 (2500)
RHB-3/4	3/4	1/4	27.4	11.4	26.9	826 (11900)	413 (5900)
RHB-3/4	3/4	3/8	27.4	15.0	26.9	564 (8100)	296 (4200)
RHB-3/4	3/4	1/2	41.4	15.7	26.9	337 (4800)	165 (2300)
RHB-1	1	1/4	34.8	11.4	34.9	999 (14400)	509 (7300)
RHB-1	1	1/2	34.8	18.5	34.9	592 (8500)	296 (4200)
RHB-1	1	3/4	34.8	22.4	34.9	365 (5200)	179 (2500)

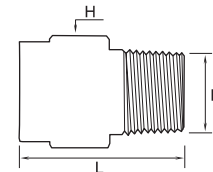
Pipe Cap



Female NPT

Part Number	P NPT in.	L mm	H Hex mm
PC-1/8	1/8	19.1	14.2
PC-1/4	1/4	22.9	19.0 5
PC-3/8	3/8	26.2	22.2
PC-1/2	1/2	34.0	26.9
PC-3/4	3/4	36.6	33.3
PC-1	1	41.1	41.2

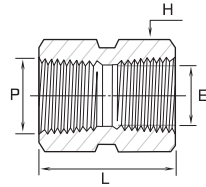
Pipe Plug



Male NPT

Part Number	P NPT in.	L mm	H Hex mm
PP-1/8	1/8	19.05	11.1
PP-1/4	1/4	24.1	14.2
PP-3/8	3/8	25	17.4
PP-1/2	1/2	30.5	22.2
PP-3/4	3/4	30.5	26.9
PP-1	1	38.1	34.9

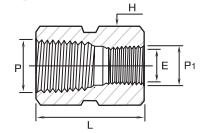
Hex Coupling



Female NPT both ends

Part Number	P NPT in.	L mm	E mm	H Hex mm
HC-1/8	1/8	20.57	8.9	14.2
HC-1/4	1/4	30.22	10.87	19.0 5
HC-3/8	3/8	33.27	15.0	22.2
HC-1/2	1/2	39.62	18.7	26.9
HC-3/4	3/4	41.14	23.5	33.3
HC-1	1	50.8	29.7	41.2

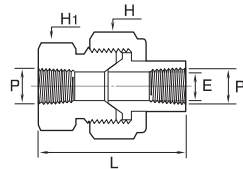
Hex Reducing Coupling



Female NPT to reduced female NPT

Part Number	P NPT in.	P1 Reduced NPT in.	L mm	E mm	H Hex mm
HRC-1/4	1/4	1/8	31.2	8.9	19.0 5
HRC-3/8	3/8	1/4	34.8	11.7	22.2
HRC-1/2	1/2	1/8	39.4	8.7	26.9
HRC-1/2	1/2	1/4	44.2	11.7	26.9
HRC-1/2	1/2	3/8	45.0	15.0	26.9
HRC-3/4	3/4	1/4	45.7	11.7	33.3
HRC-1	1	3/4	57.0	23.5	41.2

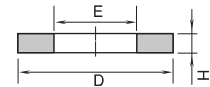
Union Ball Joint



Female NPT both ends

Part Number	P NPT in.	L mm	E mm	H Hex mm	H1 Wrenc h Flat mm
UBJ-1/8	1/8	45.7	6.9	28.6	23.8
UBJ-1/4	1/4	59.4	9.1	34.9	30.2
UBJ-3/8	3/8	63.5	13.2	38.1	33.3
UBJ-1/2	1/2	68.6	15.7	44.5	41.3
UBJ-3/4	3/4	79.2	22.4	50.8	47.6
UBJ-1	1	90.4	26.2	63.5	60.3

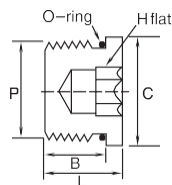
Iso Parallel Copper Gasket



For ISO Parallel male thread

Part Number	ISO 228-1	E mm	H mm	D mm
IPCG-1/8	1/8	9.9	1.0	15.0
IPCG-1/4	1/4	13.2	1.5	19.1
IPCG-3/8	3/8	16.8	1.5	23.1
IPCG-1/2	1/2	21.1	1.5	26.9
IPCG-3/4	3/4	26.7	2.0	33.0
IPCG-1	1	33.3	2.0	40.1

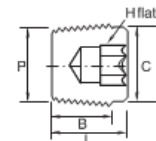
Hollow Hex Plug



Male SAE/MS Straight Thread

Part Number	P SAE/MS Thread	L mm	B mm	C mm	H mm	Uniform O-ring Size
HHPS-4	7/16-20	11.4	9.1	14.2	4.76	-904
HHPS-6	9/16-18	12.2	9.9	17.5	6.35	-906
HHPS-8	3/4-16	14.2	11.2	22.4	7.93	-908
HHPS-12	1 1/16-12	19.1	15.0	31.8	14.28	-912
HHPS-16	1 5/16-12	19.1	15.0	38.1	15.87	-916

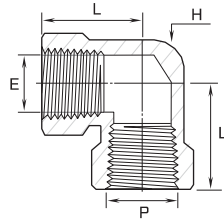
Hollow Hex Plug



Male NPT

Part Number	P NPT in.	L mm	B mm	C mm	H mm
HHPM-1/8	1/8	10.4	7.4	9.4	4.76
HHPM-1/4	1/4	15.5	12.4	12.1	6.35
HHPM-3/8	3/8	15.0	11.9	15.7	7.93
HHPM-1/2	1/2	19.3	16.2	19.3	9.52

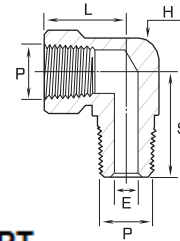
Elbow



Female NPT both ends

Part Number	P NPT in.	L mm	E mm	H Wrench Flat mm	Pressure Rating psi (bar)	
					SS316, C.Steel	Brass
E-1/8	1/8	24.1	8.9	12.7	6200 (427)	3100 (213)
E-1/4	1/4	29.0	11.7	17.5	7200 (496)	3600 (248)
E-3/8	3/8	34.5	15.0	20.6	5600 (385)	2800 (192)
E-1/2	1/2	37.0	18.7	25.4	5600 (385)	2800 (192)
E-3/4	3/4	46.5	23.5	31.8	5100 (351)	2500 (172)
E-1	1	48.8	29.7	42.9	6400 (440)	3200 (220)

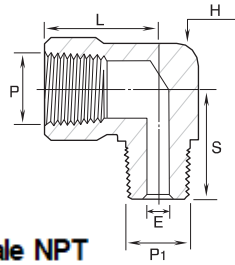
Street Elbow



Female to male NPT

Part Number	P NPT in.	L mm	S mm	E mm	H Wrench Flat mm	Pressure Rating psi (bar)	
						SS316, C.Steel	Brass
SE-1/8	1/8	24.1	19.6	4.8	12.7	6200 (427)	3100 (213)
SE-1/4	1/4	29.0	26.5	7.1	17.5	7200 (496)	3600 (248)
SE-3/8	3/8	34.5	28.2	9.6	20.6	5600 (385)	2800 (192)
SE-1/2	1/2	37.0	35.3	11.9	25.4	5600 (385)	2800 (192)
SE-3/4	3/4	46.5	39.6	15.7	31.8	5100 (351)	2500 (172)
SE-1	1	48.8	49.2	22.3	42.9	5300 (365)	2600 (179)

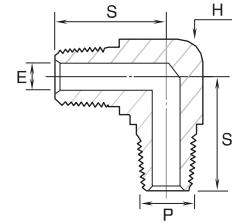
Reducing Street Elbow



Female to reduced Male NPT

Part Number	P NPT in.	P1 Male NPT in.	L mm	S mm	E mm	H Wrench Flat mm	Pressure Rating psi (bar)	
							SS316, C.Steel	Brass
RSE-1/4	1/4	1/8	29.0	22.4	4.8	17.5	7200 (496)	3600 (248)
RSE-3/8	3/8	1/4	34.5	28.2	7.1	20.6	5600 (385)	2800 (192)
RSE-1/2	1/2	1/4	37.0	30.5	7.1	25.4	5600 (385)	2800 (192)
RSE-1/2	1/2	3/8	37.0	30.5	9.6	25.4	5600 (385)	2800 (192)
RSE-3/4	3/4	1/2	46.5	41.6	11.9	31.8	5100 (351)	2500 (172)
RSE-1	1	1/2	48.8	45.5	11.9	42.9	5300 (365)	2600 (179)

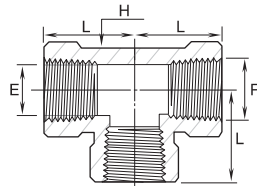
Male Elbow



Male NPT both ends

Part Number	P NPT in.	S mm	E mm	H Wrench Flat mm	Pressure Rating psi (bar)	
					SS316, C.Steel	Brass
ME-1/8	1/8	19.05	4.8	12.7	10000 (689)	5000 (344)
ME-1/4	1/4	24.5	7.1	12.7	8000 (551)	4000 (275)
ME-3/8	3/8	26.9	9.6	17.5	7800 (537)	3900 (268)
ME-1/2	1/2	33.2	11.9	20.6	7700 (530)	3800 (261)
ME-3/4	3/4	35.3	15.7	25.4	7300 (502)	3600 (248)
ME-1	1	44.5	22.3	31.8	5300 (365)	2600 (179)

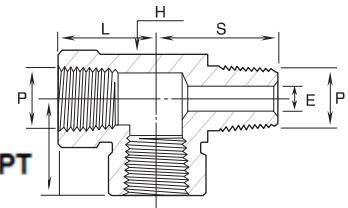
Tee



Female NPT

Part Number	P NPT in.	L mm	E mm	H Wrenc h Flat mm	Pressure Rating psi (bar)	
					SS316, C.Steel	Brass
T-1/8	1/8	24.1	8.9	12.7	6200 (437)	3100 (213)
T-1/4	1/4	29.0	11.7	17.5	7200 (496)	3600 (248)
T-3/8	3/8	34.5	15.0	20.6	5600 (385)	2800 (192)
T-1/2	1/2	37.0	18.7	25.4	5600 (385)	2800 (192)
T-3/4	3/4	46.5	23.5	31.8	5100 (351)	2500 (172)
T-1	1	48.8	29.7	42.9	6400 (440)	3200 (220)

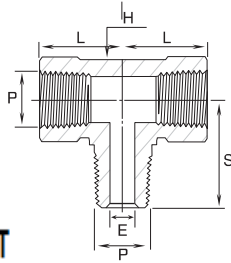
Run Tee



Female to male to female NPT

Part Number	P NPT in.	L mm	S mm	E mm	H Wrench Flat mm	Pressure Rating psi (bar)	
						SS316, C.Steel	Brass
RT-1/8	1/8	24.1	19.6	4.8	12.7	6200 (427)	3100 (213)
RT-1/4	1/4	29.0	26.5	7.1	17.5	7200 (496)	3600 (248)
RT-3/8	3/8	34.5	28.2	9.6	20.6	5600 (385)	2800 (192)
RT-1/2	1/2	37.0	35.3	11.9	25.4	5600 (385)	2800 (192)
RT-3/4	3/4	46.5	39.6	15.7	31.8	5100 (351)	2500 (172)
RT-1	1	48.8	49.2	22.3	42.9	5300 (365)	2600 (179)

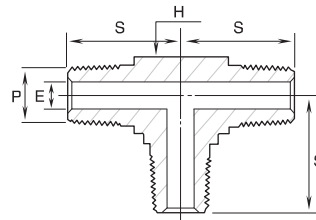
Branch Tee



Female to female to male NPT

Part Number	P NPT in.	L mm	S mm	E mm	H Wrench Flat mm	Pressure Ratings, psig(bar)	
						SS316, C.Steel	Brass
BT-1/8	1/8	24.1	19.6	4.8	12.7	6200 (427)	3100 (213)
BT-1/4	1/4	29.0	26.5	7.1	17.5	7200 (496)	3600 (248)
BT-3/8	3/8	34.5	28.2	9.6	20.6	5600 (385)	2800 (192)
BT-1/2	1/2	37.0	35.3	11.9	25.4	5600 (385)	2800 (192)
BT-3/4	3/4	46.5	39.6	15.7	31.8	5100 (351)	2500 (172)
BT-1	1	48.8	49.2	22.3	42.9	5300 (365)	2600 (179)

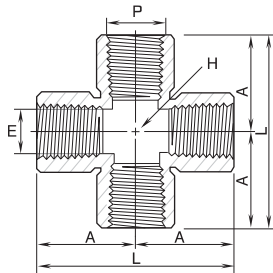
Male Tee



Male NPT

Part Number	P NPT in.	S mm	E mm	H Wrench Flat mm	Pressure Ratings, psig(bar)	
					SS316, C.Steel	Brass
MT-1/8	1/8	19.05	4.8	12.7	10000 (689)	5000 (344)
MT-1/4	1/4	24.5	7.1	12.7	8000 (551)	4000 (275)
MT-3/8	3/8	26.9	9.6	17.5	7800 (537)	3900 (268)
MT-1/2	1/2	33.2	11.9	20.6	7700 (530)	3800 (261)
MT-3/4	3/4	35.3	15.7	25.4	7300 (502)	3600 (248)
MT-1	1	44.5	22.3	31.8	5300 (365)	2600 (179)

Cross

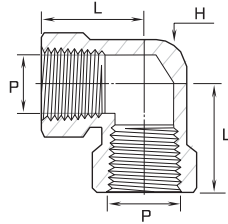


Female NPT

Part Number	P NPT in.	L mm	E mm	H Wrench Flat mm	Pressure Ratings, psig(bar)	
					SS316, C.Steel	Brass
C-1/8	1/8	48.2	8.6	12.7	6200 (427)	3100 (213)
C-1/4	1/4	58.0	11.4	17.5	7200 (496)	3600 (248)
C-3/8	3/8	69.0	15.0	20.6	5600 (385)	2800 (192)
C-1/2	1/2	74.0	18.5	25.4	5600 (385)	2800 (192)
C-3/4	3/4	93.0	23.9	31.8	5100 (351)	2500 (172)
C-1	1	97.6	29.7	42.9	5300 (365)	2600 (179)

10,000 PSI Pipe Fittings

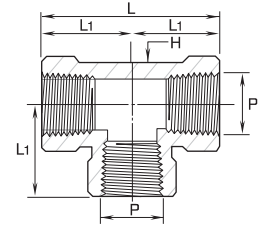
Elbow



Female NPT both ends

Part Number	P NPT in.	H in.(mm)	L mm
EF-1/8	1/8	13/16(20.65)	26.0
EF-1/4	1/4	1(25.4)	37.0
EF-3/8	3/8	1-1/4(31.75)	46.5
EF-1/2	1/2	1- 11/16(42.86)	50.0
EF-3/4	3/4	50	57.0
EF-1	1	55	57.0

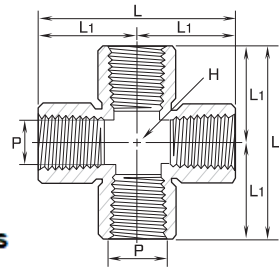
Tee



Female NPT

Part Number	P NPT in.	H in.(mm)	L mm	L1 mm
TF-1/8	1/8	13/16(20.65)	52	26
TF-1/4	1/4	1(25.4)	74	37
TF-3/8	3/8	1-1/4(31.75)	93	46.5
TF-1/2	1/2	1- 11/16(42.86)	100	50
TF-3/4	3/4	50	114	57
TF-1	1	55	114	57

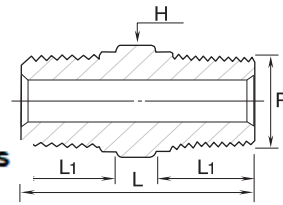
Cross



Female NPT both ends

Part Number	P NPT in.	H Wrench flat in.(mm)	L mm	L1 mm
CF-1/8	1/8	13/16 (20.65)	52	26
CF-1/4	1/4	1 (25.4)	74	37
CF-3/8	3/8	1-1/4 (31.75)	93	46.5
CF-1/2	1/2	1-11/16 (42.86)	100	50
CF-3/4	3/4	50	114	57
CF-1	1	55	114	57

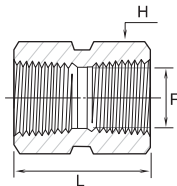
Hex Nipple



Male NPT both ends

Part Number	P NPT in.	H HEX in.(mm)	L mm	L1 mm
HNM-1/8	1/8	7/16 (11.11)	25.6	7.4
HNM-1/4	1/4	9/16 (14.28)	35.5	14.2
HNM-3/8	3/8	11/16 (17.46)	36.3	19.1
HNM-1/2	1/2	7/8 (22.2)	46.7	19.1
HNM-3/4	3/4	1-1/16 (26.98)	46.7	19.1
HNM-1	1	1-3/8 (34.92)	58.9	23.9

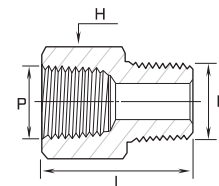
Hex Coupling



Female NPT both ends

Part Number	P NPT in.	H HEX in.(mm)	L mm
HCF-1/8	1/8	13/16 (20.65)	20.5
HCF-1/4	1/4	1 (25.4)	30.2
HCF-3/8	3/8	1-1/4 (31.75)	33.2
HCF-1/2	1/2	1-1/2 (38.1)	39.6
HCF-3/4	3/4	1-3/4 (44.4)	41.1
HCF-1	1	2-1/8 (53.9)	50.8

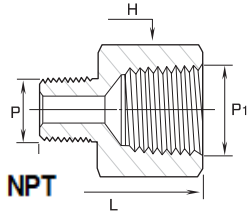
Adapter



Female NPT to male NPT

Part Number	P NPT in.	H HEX in.(mm)	L mm
AF-1/8	1/8	13/16 (20.65)	27.9
AF-1/4	1/4	1 (25.4)	36.7
AF-3/8	3/8	1-1/4 (31.75)	38.5
AF-1/2	1/2	1-1/2 (38.1)	51.3
AF-3/4	3/4	1-3/4 (44.4)	52.1
AF-1	1	2-1/8 (53.9)	58.7

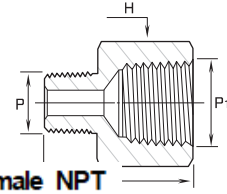
Reducing Adapter



Male NPT to larger female NPT

Part Number	P NPT in.	P1 NPT in.	H HEX in.(mm)	L mm
RAL-1/8	1/8	1/4	1 (25.4)	32. 2
RAL-1/4	1/4	3/8	1-1/4 (31.75)	38. 5
RAL-1/4	1/4	1/2	1-1/2 (38.1)	46. 4
RAL-1/4	1/4	3/4	1-3/4 (44.4)	47. 2
RAL-3/8	3/8	1/2	1-1/2 (38.1)	46
RAL-3/8	3/8	3/4	1-3/4 (44.4)	47. 2
RAL-3/8	3/8	1	2-1/8 (53.9)	49
RAL-1/2	1/2	3/4	1-3/4 (44.4)	52. 1
RAL-1/2	1/2	1	2-1/8 (53.9)	53. 9
RAL-3/4	3/4	1	2-1/8 (53.9)	53. 9

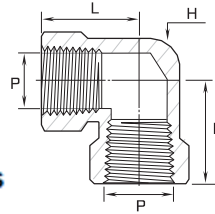
Reducing Adapter



Male NPT to reduced female NPT

Part Number	P NPT in.	P1 NPT in.	H HEX in.(mm)	L mm
RAR-1/4	1/4	1/8	13/16 (20.65)	32.4
RAR-3/8	3/8	1/8	13/16 (20.65)	32.4
RAR-3/8	3/8	1/4	1 (25.4)	36.3
RAR-1/2	1/2	1/8	7/8 (22.2)	37.3
RAR-1/2	1/2	1/4	1 (25.4)	41.2
RAR-1/2	1/2	3/8	1-1/4 (31.75)	43.4
RAR-3/4	3/4	1/4	1-1/16 (26.98)	41.6
RAR-3/4	3/4	3/8	1-1/4 (31.75)	43.4
RAR-3/4	3/4	1/2	1-1/2 (38.1)	51.3
RAR-1	1	1/4	1-3/8 (34.92)	46.4
RAR-1	1	1/2	1-1/2 (38.1)	55.7
RAR-1	1	3/4	1-3/4 (44.4)	56.9

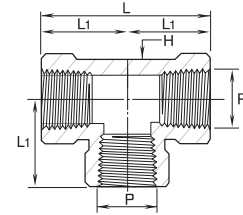
Elbow



Female NPT both ends

Part Number	Working Pressure	P NPT in.	H Wrench flat in.(mm)	L mm
E-1-1/4	6,000 psi 413 bar	1-1/4	2-3/4 (69.85)	70
E-1-1/2	6,000 psi 413 bar	1-1/2	2-3/4 (69.85)	70
E-2	6,000 psi 413 bar	2	3 (76.2)	70

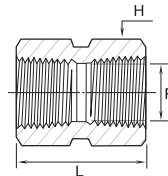
Tee



Female NPT

Part Number	Working Pressure	P NPT in.	H Wrench flat in.(mm)	L mm	L1 mm
T-1-1/4	6,000 psi 413 bar	1-1/4	2-3/4 (69.85)	140	70
T-1-1/2	6,000 psi 413 bar	1-1/2	2-3/4 (69.85)	140	70
T-2	6,000 psi 413 bar	2	3 (76.2)	140	70

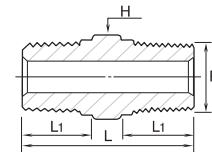
Hex Coupling



Female NPT both ends

Part Number	Working Pressure	P NPT in.	H HEX in.(mm)	L mm
HC-1-1/4	6,000 psi 413 bar	1-1/4	2-1/8 (53.9)	66.55
HC-1-1/2	6,000 psi 413 bar	1-1/2	2-3/4 (69.85)	66.55
HC-2	6,000 psi 413 bar	2	3 (76.2)	66.55

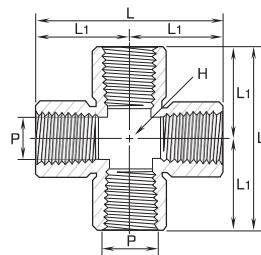
Hex Nipple



Male NPT both ends

Part Number	Working Pressure	P NPT in.	H HEX in.(mm)	L mm	L1 mm
HN-1-1/4	6,000 psi 413 bar	1-1/4	1-3/4 (44.45)	61.21	23.9
HN-1-1/2	6,000 psi 413 bar	1-1/2	2 (50.8)	68	26.2
HN-2	6,000 psi 413 bar	2	2-3/4 (69.85)	69.8	26.9

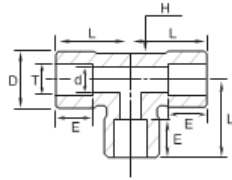
Cross



Female NPT

Part Number	Working Pressure	P NPT in.	H HEX in.(mm)	L mm	L1 mm
C-1-1/4	6,000 psi 413 bar	1-1/4	2-3/4 (69.85)	140	70
C-1-1/2	6,000 psi 413 bar	1-1/2	2-3/4 (69.85)	140	70
C-2	6,000 psi 413 bar	2	3 (76.2)	140	70

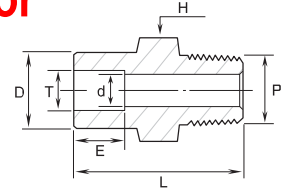
Union Tee



Tubes

Part Number	T Tube O.D.	d mm	D mm	E mm	H Wrench Flat mm	L mm	Working psig	Pressure bar
UT-1/8	1/8	2.3	13.4	2.5	12.7	15.0	11,800	813
UT-1/4	1/4	4.6	13.4	7.1	12.7	21.8	11,300	778
UT-3/8	3/8	7.1	15.8	7.9	12.7	24.0	8,400	578
UT-1/2	1/2	10.2	20.6	9.7	17.4	29.0	7,800	537
UT-5/8	5/8	12.7	23.8	10.4	20.6	34.5	6,700	461
UT-3/4	3/4	15.7	28.6	11.2	25.4	37.0	6,700	461
UT-1	1	22.1	35.0	15.7	31.8	46.5	5,800	400

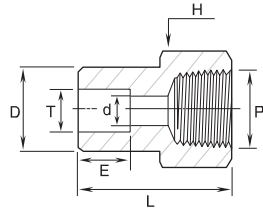
Male Connector



Tube to Male NPT

Part Number	T Tube O.D.	P NPT in.	d mm	D mm	E mm	H Hex mm	L mm	Working psig	Pressure bar
MC-1/4	1/4	1/4	4.6	12.2	7.1	14.2	29.2	7,500	516
MC-3/8	3/8	1/4	7.1	15.3	7.9	15.8	31.8	7,500	516
MC-3/8	3/8	3/8	7.1	15.3	7.9	17.4	31.8	7,300	502
MC-3/8	3/8	1/2	7.1	15.3	7.9	22.2	37.8	7,200	496
MC-1/2	1/2	1/4	7.1	18.5	9.7	19.05	33.3	6,200	427
MC-1/2	1/2	3/8	9.4	18.5	9.7	19.05	33.3	6,200	427
MC-1/2	1/2	1/2	10.2	18.5	9.7	22.2	38.9	6,200	427

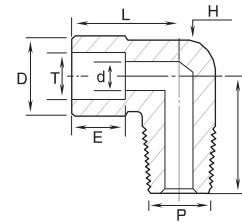
Female Connector



Tube to female NPT

Part Number	T Tube O.D.	p- NPT	d mm	D mm	E mm	H Hex mm	L mm	Working psig	Pressure bar
FC-1/8	1/8	1/8	2.3	7.4	2.5	14.2	21.1	6100	420
FC-1/4	1/4	1/8	4.6	12.2	7.1	14.2	26.7	6100	420
FC-1/4	1/4	1/4	4.6	12.2	7.1	19.05	30.0	6200	427
FC-3/8	3/8	1/4	7.1	15.3	7.9	19.05	31.5	6200	427
FC-1/2	1/2	3/8	10.2	18.5	9.7	22.2	34.5	5000	344
FC-1/2	1/2	1/2	10.2	18.5	9.7	26.9	40.4	4600	316
FC-5/8	5/8	1/2	12.7	23.4	10.4	26.9	41.9	4600	316
FC-3/4	3/4	3/4	15.7	26.7	11.2	33.3	43.9	4300	296

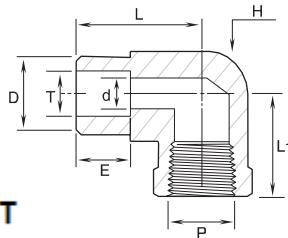
Male Elbow



Tube to male NPT

Part Number	T Tube O.D.	p- NPT	d mm	D mm	E mm	H Wrench Flat mm	L mm	S mm	Working psig	Pressure bar
MEM-1/4	1/4	1/4	4.6	15.8	7.1	12.7	20.1	24.5	7500	516
MEM-3/8	3/8	1/4	7.1	15.8	7.9	12.7	24.1	24.5	7500	516
MEM-3/8	3/8	3/8	7.1	20.6	7.9	17.4	24.6	29.0	7300	502
MEM-3/8	3/8	1/2	7.1	15.2	7.9	20.6	25.9	34.5	7200	496
MEM-1/2	1/2	1/2	10.2	20.6	9.7	20.6	27.4	34.5	6200	427
MEM-3/4	3/4	3/4	15.7	28.6	11.2	25.4	37.0	37.0	6700	461

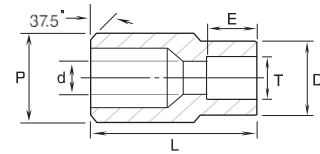
Female Elbow



Tube to female NPT

Part Number	T Tube O.D.	p- NPT	d mm	D mm	E mm	H Wrench Flat mm	L mm	L1 mm	Working Pressure	
									psig	bar
FEF-1/4	1/4	1/4	4.6	12.2	7.1	17.4	22.9	29.7	6200	427
FEF-3/8	3/8	1/4	7.1	15.3	7.9	17.4	25.1	29.7	7000	482
FEF-3/8	3/8	1/2	7.1	15.3	7.9	25.4	28.7	37.0	5400	372
FEF-1/2	1/2	1/2	10.2	18.5	9.7	25.4	30.2	37.0	5400	372

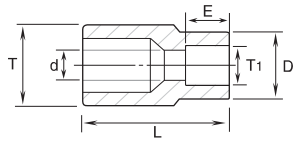
Pipe to Tube Socket Weld



Pipe to Tube

Part Number	P Pipe Size	T Tube Socket O.D.	d mm	D mm	E mm	L mm	Working Pressure	
							psig	bar
PTSW-1/4	1/4	1/4	4.6	13.7	7.1	22.4	9600	661
PTSW-3/8	3/8	3/8	7.1	15.3	7.9	26.2	7600	523
PTSW-3/8	3/8	1/2	10.2	18.5	9.7	27.9	6200	427
PTSW-1/2	1/2	1/4	4.6	12.2	7.1	28.4	7300	502
PTSW-1/2	1/2	3/8	7.1	15.3	7.9	28.4	7300	502
PTSW-1/2	1/2	1/2	10.2	18.5	9.7	30.2	6200	427
PTSW-3/4	3/4	3/8	7.1	15.3	7.9	38.1	6200	427
PTSW-3/4	3/4	1/2	10.2	18.5	9.7	38.1	6200	427

Tube to Tube Socket Weld



Tube to Tube

Part Number	T Tube O.D	T1 Tube Socket O.D	d mm	D mm	E mm	L mm	Working Pressure	
							psig	bar
TTSW-1/4	1/4	1/8	2.3	7.4	2.5	14.2	11800	813
TTSW-3/8	3/8	1/4	4.6	12.2	7.1	19.1	7700	530
TTSW-1/2	1/2	1/4	4.6	12.7	7.1	22.4	7000	482
TTSW-1/2	1/2	3/8	8.1	15.7	7.9	22.4	7000	482
TTSW-3/4	3/4	1/2	10.2	18.5	9.7	28.4	5900	406
TTSW-1	1	1/2	10.2	18.5	9.7	35.1	5600	386