

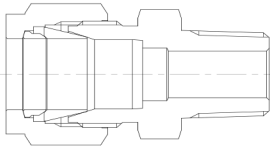
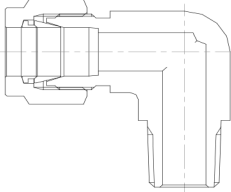
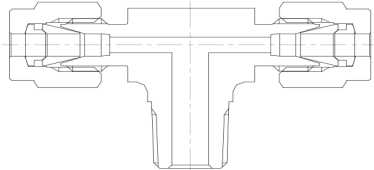
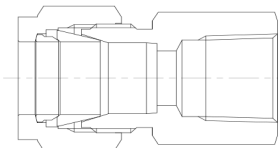
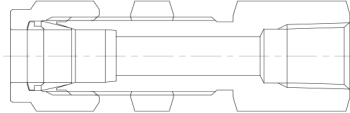
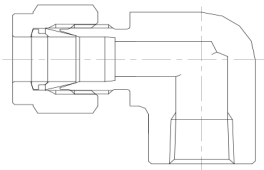
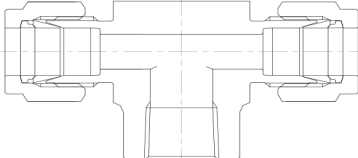
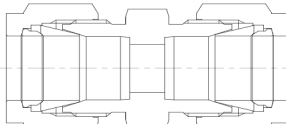
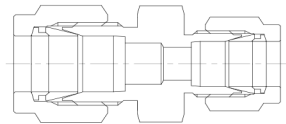
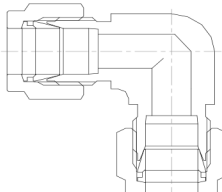
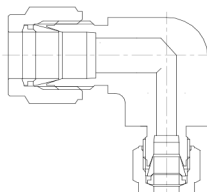
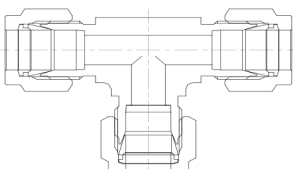
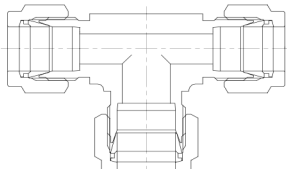
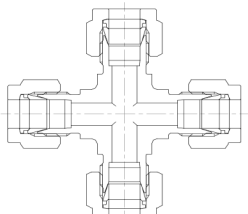
**DOUBLE FERRULE TYPE
TUBE FITTINGS**

D I M E N S I O N S H E E T

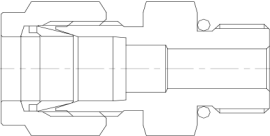
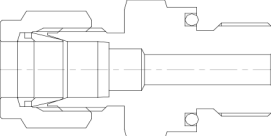
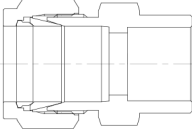
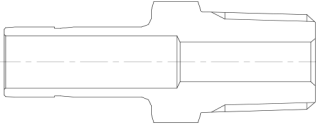
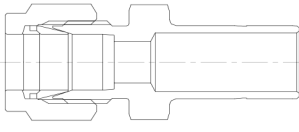
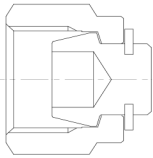
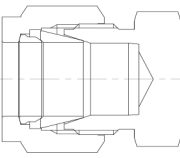
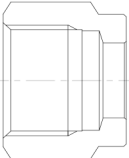
**SCHEDULE PIPE SERIES
STAINLESS STEEL TUBE**

IHARA SCIENCE CORPORATION

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9	MDLA Union Elbow	9	MDLR Reducing Union Elbow		
					
10	MDTA Union Tee	10	MDTR Reducing Union Tee	11	MDXA Union Cross
					

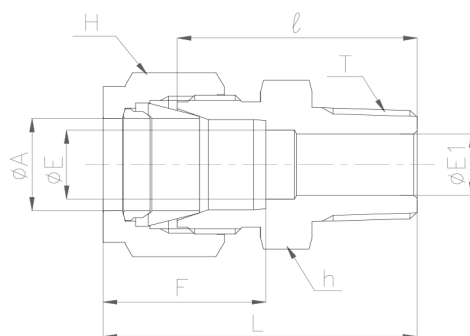
Visual Index

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15	MDBA Plug 	15	MDCA Cap 		
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MDCT

Male Connector

Connects schedule pipe to female tapered pipe thread

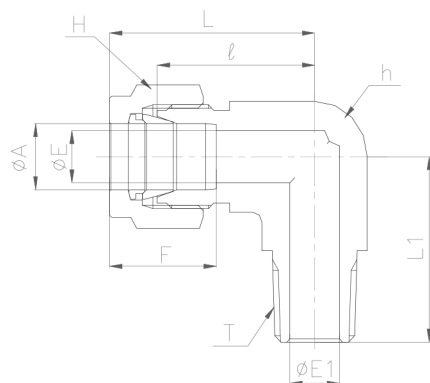


Part No.		A	T	E	E1	h	H	ℓ	L	F
ANSI NPT	ISO/JIS R	mm	NPT/R	mm	mm	Hex	Hex	mm	mm	mm
MDCT 10.5-2	MDCT 10.5-R2	10.5 (1/8 B)	1/8	7.9	4.8	22	22	31.3	41.3	22.7
MDCT 10.5-4	MDCT 10.5-R4	10.5 (1/8 B)	1/4	7.9	7.1	22	22	33.3	43.3	22.7
MDCT 10.5-6		10.5 (1/8 B)	3/8	7.9	7.9	22	22	33.3	43.3	22.7
	MDCT 10.5-R6	10.5 (1/8 B)	3/8	7.9	7.9	22	22	34.3	44.3	22.7
MDCT 10.5-8	MDCT 10.5-R8	10.5 (1/8 B)	1/2	7.9	7.9	22	22	38.9	48.9	22.7
	MDCT 13.8-R2	13.8 (1/4 B)	1/8	10.4	4.8	22	24	31.3	41.9	23.3
MDCT 13.8-4	MDCT 13.8-R4	13.8 (1/4 B)	1/4	10.4	7.1	22	24	33.3	43.9	23.3
MDCT 13.8-6		13.8 (1/4 B)	3/8	10.4	10.4	22	24	33.3	43.9	23.3
	MDCT 13.8-R6	13.8 (1/4 B)	3/8	10.4	10.4	22	24	34.3	44.9	23.3
MDCT 13.8-8	MDCT 13.8-R8	13.8 (1/4 B)	1/2	10.4	10.4	22	24	38.9	49.5	23.3
	MDCT 13.8-R12	13.8 (1/4 B)	3/4	10.4	12.7	27	24	43.7	54.3	23.3
MDCT 17.3-4	MDCT 17.3-R4	17.3 (3/8 B)	1/4	12.7	7.1	27	30	36.7	46.9	24.5
MDCT 17.3-6		17.3 (3/8 B)	3/8	12.7	10.4	27	30	36.7	46.9	24.5
	MDCT 17.3-R6	17.3 (3/8 B)	3/8	12.7	10.4	27	30	37.7	47.9	24.5
MDCT 17.3-8	MDCT 17.3-R8	17.3 (3/8 B)	1/2	12.7	12.7	27	30	41.7	51.9	24.5
MDCT 17.3-12		17.3 (3/8 B)	3/4	12.7	12.7	27	30	41.7	51.9	24.5
	MDCT 17.3-R12	17.3 (3/8 B)	3/4	12.7	12.7	27	30	43.7	53.9	24.5
	MDCT 21.7-R2	21.7 (1/2 B)	1/8	16.5	4.8	30	32	32.7	42.9	26.1
MDCT 21.7-6	MDCT 21.7-R4	21.7 (1/2 B)	1/4	16.5	7.1	30	32	36.7	46.9	26.1
		21.7 (1/2 B)	3/8	16.5	10.4	30	32	36.7	46.9	26.1
	MDCT 21.7-R6	21.7 (1/2 B)	3/8	16.5	10.4	30	32	37.7	47.9	26.1
MDCT 21.7-8	MDCT 21.7-R8	21.7 (1/2 B)	1/2	16.5	12.7	30	32	41.7	51.9	26.1
MDCT 21.7-12		21.7 (1/2 B)	3/4	16.5	16.5	30	32	41.7	51.9	26.1
	MDCT 21.7-R12	21.7 (1/2 B)	3/4	16.5	16.5	30	32	43.7	53.9	26.1

MDLN

Male Elbow

Connects schedule pipe to female tapered pipe thread

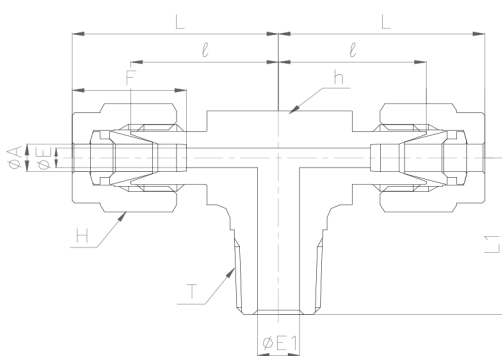


Part No.		A	T	E	E1	h	H	l	L	L ₁	F
ANSI NPT	ISO/JIS R	mm	NPT/R	mm	mm	Hex	Hex	mm	mm	mm	mm
MDLN 10.5-2	MDLN 10.5-R2	10.5 (1/8 B)	1/8	7.9	4.8	22	22	27.0	37.0	25.5	22.7
MDLN 10.5-4	MDLN 10.5-R4	10.5 (1/8 B)	1/4	7.9	7.1	22	22	27.0	37.0	29.5	22.7
MDLN 10.5-6	MDLN 10.5-R6	10.5 (1/8 B)	3/8	7.9	10.4	22	22	27.0	37.0	29.5	22.7
MDLN 10.5-8	MDLN 10.5-R8	10.5 (1/8 B)	1/2	7.9	12.7	24	22	27.0	37.0	34.0	22.7
MDLN 13.8-4	MDLN 13.8-R4	13.8 (1/4 B)	1/4	10.4	7.1	22	24	27.0	37.6	29.5	23.3
MDLN 13.8-6	MDLN 13.8-R6	13.8 (1/4 B)	3/8	10.4	10.4	22	24	27.0	37.6	29.5	23.3
MDLN 13.8-8	MDLN 13.8-R8	13.8 (1/4 B)	1/2	10.4	12.7	24	24	27.0	37.6	34.0	23.3
MDLN 13.8-12	MDLN 13.8-R12	13.8 (1/4 B)	3/4	10.4	18.3	27	24	28.2	38.8	37.5	23.3
MDLN 17.3-6	MDLN 17.3-R6	17.3 (3/8 B)	3/8	12.7	10.4	27	30	28.2	38.4	31.5	24.5
MDLN 17.3-8	MDLN 17.3-R8	17.3 (3/8 B)	1/2	12.7	12.7	27	30	28.2	38.4	35.5	24.5
MDLN 17.3-12	MDLN 17.3-R12	17.3 (3/8 B)	3/4	12.7	18.3	27	30	28.2	38.4	37.5	24.5
MDLN 21.7-6	MDLN 21.7-R6	21.7 (1/2 B)	3/8	16.5	10.4	30	32	32.5	42.7	36.5	26.1
MDLN 21.7-8	MDLN 21.7-R8	21.7 (1/2 B)	1/2	16.5	12.7	30	32	32.5	42.7	40.5	26.1
MDLN 21.7-12	MDLN 21.7-R12	21.7 (1/2 B)	3/4	16.5	18.3	30	32	32.5	42.7	42.5	26.1

MDTN

Male Branch Tee

Connects schedule pipe to female tapered pipe thread

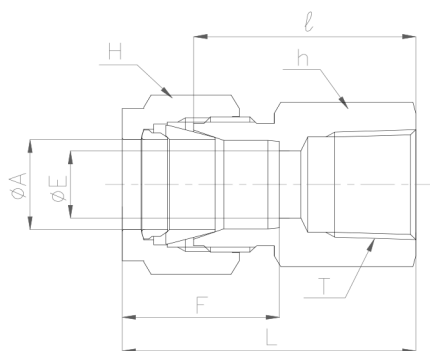


Part No.		A	T	E	E1	h	H	l	L	L ₁	F
ANSI NPT	ISO/JIS R	mm	NPT/R	mm	mm	Flat	Hex	mm	mm	mm	mm
MDTN 10.5-4	MDTN 10.5-R4	10.5 (1/8 B)	1/4	7.9	7.1	22	22	27.0	37.0	29.5	22.7
MDTN 10.5-6	MDTN 10.5-R6	10.5 (1/8 B)	3/8	7.9	10.4	22	22	27.0	37.0	29.5	22.7
MDTN 13.8-4	MDTN 13.8-R4	13.8 (1/4 B)	1/4	10.4	7.1	22	24	27.0	37.6	29.5	23.3
MDTN 13.8-6	MDTN 13.8-R6	13.8 (1/4 B)	3/8	10.4	10.4	22	24	27.0	37.6	29.5	23.3
MDTN 17.3-6	MDTN 17.3-R6	17.3 (3/8 B)	3/8	12.7	10.4	27	30	28.2	38.4	31.5	24.5
MDTN 17.3-8	MDTN 17.3-R8	17.3 (3/8 B)	1/2	12.7	12.7	27	30	28.2	38.4	35.5	24.5
MDTN 21.7-6	MDTN 21.7-R6	21.7 (1/2 B)	3/8	16.5	10.4	30	32	32.5	42.7	36.5	26.1
MDTN 21.7-8	MDTN 21.7-R8	21.7 (1/2 B)	1/2	16.5	12.7	30	32	32.5	42.7	40.5	26.1

MDSA

Female Connector

Connects schedule pipe to male tapered pipe thread

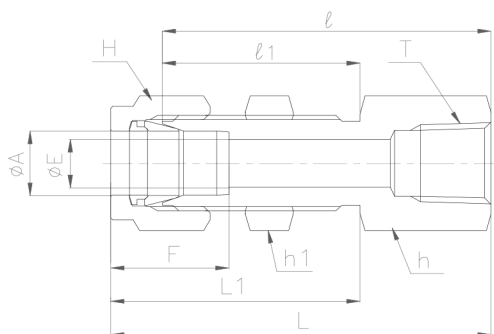


Part No.		A	T	E	h	H	l	L	F
ANSI NPT	ISO/JIS Rc	mm	NPT/Rc	mm	Hex	Hex	mm	mm	mm
MDSA 10.5-2	MDSA 10.5-R2	10.5 (1/8 B)	1/8	7.9	22	22	28.6	38.6	22.7
MDSA 10.5-4	MDSA 10.5-R4	10.5 (1/8 B)	1/4	7.9	22	22	32.6	42.6	22.7
MDSA 10.5-6	MDSA 10.5-R6	10.5 (1/8 B)	3/8	7.9	22	22	32.9	42.9	22.7
MDSA 10.5-8	MDSA 10.5-R8	10.5 (1/8 B)	1/2	7.9	27	22	36.6	46.6	22.7
MDSA 10.5-12	MDSA 10.5-R12	10.5 (1/8 B)	3/4	7.9	32	22	40.9	50.9	22.7
MDSA 13.8-4	MDSA 13.8-R4	13.8 (1/4 B)	1/4	10.4	22	24	32.6	43.2	23.3
MDSA 13.8-6	MDSA 13.8-R6	13.8 (1/4 B)	3/8	10.4	22	24	32.9	43.5	23.3
MDSA 13.8-8	MDSA 13.8-R8	13.8 (1/4 B)	1/2	10.4	27	24	36.6	47.2	23.3
MDSA 13.8-12	MDSA 13.8-R12	13.8 (1/4 B)	3/4	10.4	32	24	40.9	51.5	23.3
MDSA 17.3-4	MDSA 17.3-R4	17.3 (3/8 B)	1/4	12.7	27	30	33.0	43.2	24.5
MDSA 17.3-6	MDSA 17.3-R6	17.3 (3/8 B)	3/8	12.7	27	30	33.4	43.6	24.5
MDSA 17.3-8	MDSA 17.3-R8	17.3 (3/8 B)	1/2	12.7	27	30	37.4	47.6	24.5
MDSA 17.3-12	MDSA 17.3-R12	17.3 (3/8 B)	3/4	12.7	32	30	40.9	51.1	24.5
MDSA 21.7-8	MDSA 21.7-R8	21.7 (1/2 B)	1/2	16.5	30	32	39.9	50.1	26.1
MDSA 21.7-12	MDSA 21.7-R12	21.7 (1/2 B)	3/4	16.5	32	32	40.9	51.1	26.1

MDSS

Bulkhead Female Connector

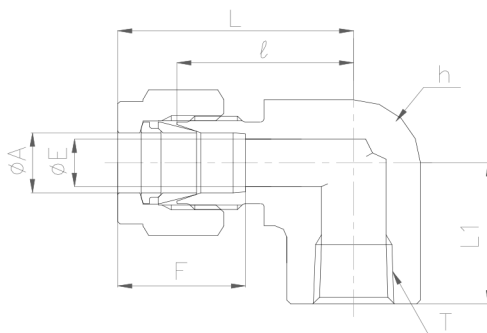
Connects schedule pipe to male ISO tapered pipe thread



Part No.	A	T	E	h	h ₁	H	l	l ₁	L	L ₁	F	Panel	
	mm	Rc	mm	Hex	Hex	Hex	mm	mm	mm	mm	mm	Hole	Thick
MDSA 10.5-R4	10.5 (1/8 B)	1/4	7.9	24	24	22	52.7	32.0	62.7	42.0	22.7	19.4	11.1
MDSA 13.8-R6	13.8 (1/4 B)	3/8	10.4	27	27	24	53.5	32.5	64.1	43.1	23.3	21.0	12.1
MDSA 17.3-R6	17.3 (3/8 B)	3/8	12.7	30	30	30	59.6	38.1	69.8	48.3	24.5	25.8	14.9
MDSA 21.7-R8	21.7 (1/2 B)	1/2	16.5	36	36	32	70.0	42.0	80.2	52.2	26.1	29.0	19.5

MDLF

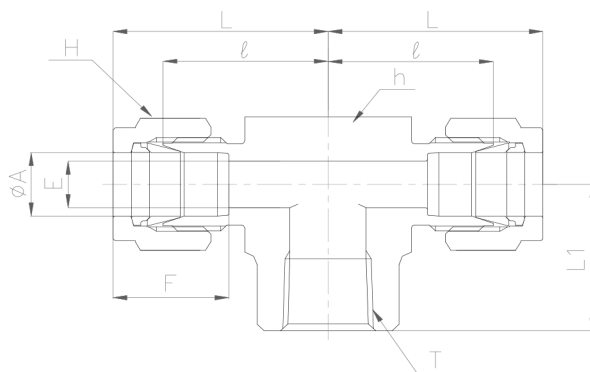
Female Elbow
Connects schedule pipe to male tapered pipe thread



Part No.		A	T	E	h	H	ℓ	L	L ₁	F
ANSI NPT	ISO/JIS Rc	mm	NPT/Rc	mm	Flat	Hex	mm	mm	mm	mm
MDLF 10.5-4	MDLF 10.5-R4	10.5 (1/8 B)	1/4	7.9	22	22	27.0	37.0	22.5	22.7
MDLF 10.5-6	MDLF 10.5-R6	10.5 (1/8 B)	3/8	7.9	24	22	27.0	37.0	22.5	22.7
MDLF 13.8-4	MDLF 13.8-R4	13.8 (1/4 B)	1/4	10.4	22	24	27.0	37.6	22.5	23.3
MDLF 13.8-6	MDLF 13.8-R6	13.8 (1/4 B)	3/8	10.4	24	24	27.0	37.6	22.5	23.3
MDLF 17.3-4	MDLF 17.3-R4	17.3 (3/8 B)	1/4	12.7	27	30	28.2	38.4	27.0	24.5
MDLF 17.3-6	MDLF 17.3-R6	17.3 (3/8 B)	3/8	12.7	27	30	28.2	38.4	28.5	24.5
MDLF 21.7-6	MDLF 21.7-R6	17.3 (1/2 B)	3/8	16.5	30	32	32.5	42.7	32.5	26.1
MDLF 21.7-8	MDLF 21.7-R8	17.3 (1/2 B)	1/2	16.5	30	32	32.5	42.7	32.5	26.1

MDTH

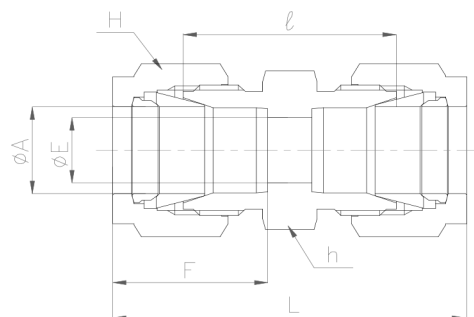
Female Branch Tee
Connects schedule pipe to male tapered pipe thread



Part No.		A	T	E	h	H	ℓ	L	L ₁	F
ANSI NPT	ISO/JIS Rc	mm	NPT	mm	Flat	Hex	mm	mm	mm	mm
MDTH 10.5-4	MDTH 10.5-R4	10.5 (1/8 B)	1/4	7.9	22	22	27.0	37.0	22.5	22.7
MDTH 10.5-6	MDTH 10.5-R6	10.5 (1/8 B)	3/8	7.9	24	22	27.0	37.0	22.5	22.7
MDTH 10.5-8	MDTH 10.5-R8	10.5 (1/8 B)	1/2	7.9	27	22	28.2	38.2	28.5	22.7
MDTH 13.8-4	MDTH 13.8-R4	13.8 (1/4 B)	1/4	10.4	22	24	27.0	37.6	22.5	23.3
MDTH 13.8-6	MDTH 13.8-R6	13.8 (1/4 B)	3/8	10.4	24	24	27.0	37.6	22.5	23.3
MDTH 13.8-8	MDTH 13.8-R8	13.8 (1/4 B)	1/2	10.4	27	24	28.2	38.8	28.5	23.3
MDTH 17.3-6	MDTH 17.3-R6	17.3 (3/8 B)	3/8	12.7	27	30	28.2	38.4	28.5	24.5
MDTH 17.3-8	MDTH 17.3-R8	17.3 (3/8 B)	1/2	12.7	27	30	28.2	38.4	28.5	24.5
MDTH 17.3-12	MDTH 17.3-R12	17.3 (3/8 B)	3/4	12.7	36	30	32.5	42.7	32.5	24.5
MDTH 21.7-6	MDTH 21.7-R6	21.7 (1/2 B)	3/8	16.5	30	32	32.5	42.7	32.5	26.1
MDTH 21.7-8	MDTH 21.7-R8	21.7 (1/2 B)	1/2	16.5	30	32	32.5	42.7	32.5	26.1
MDTH 21.7-12	MDTH 21.7-R12	21.7 (1/2 B)	3/4	16.5	36	32	32.5	42.7	32.5	26.1

MDUA

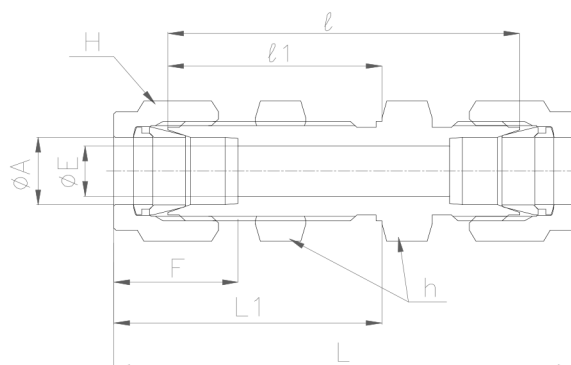
Union
Connects schedule pipes



Part No.	A	E	h	H	l	L	F
	mm	mm	mm	mm	mm	mm	mm
MDUA 10.5	10.5 (1/8 B)	7.9	22	22	32.0	52.0	22.7
MDUA 13.8	13.8 (1/4 B)	10.4	22	24	32.0	53.2	23.3
MDUA 17.3	17.3 (3/8 B)	12.7	27	30	34.5	54.9	24.5
MDUA 21.7	21.7 (1/2 B)	16.5	30	32	36.0	56.4	26.1

MDSU

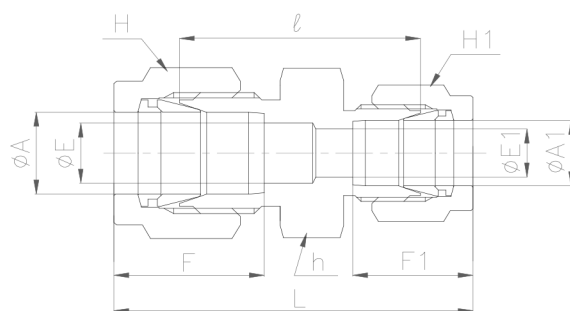
Bulkhead Union
Connects schedule pipes



Part No.	A	E	h	H	l	l ₁	L	L ₁	F	Panel	
	mm	mm	Hex	Hex	mm	mm	mm	mm	mm	hole	thick
MDSU 10.5	10.5 (1/8 B)	7.9	24	22	50.8	32.0	70.8	42.0	22.7	19.4	11.1
MDSU 13.8	13.8 (1/4 B)	10.4	27	24	52.5	32.5	73.7	43.1	23.3	21.0	12.1
MDSU 17.3	17.3 (3/8 B)	12.7	30	30	58.7	38.1	79.1	48.3	24.5	25.8	14.9
MDSU 21.7	21.7 (1/2 B)	16.5	36	32	66.0	42.0	86.4	52.2	26.1	29.0	19.5

MDUR

Reducing Union
Connects schedule pipe to fractional tube



Part No.	A	A ₁		E	E ₁	h	H	H ₁	ℓ	L	F	F ₁
	mm	in	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
MDUR 10.5-4	10.5 (1/8B)	1/4	6.35	7.9	4.8	22	22	14.29	30.5	48.0	22.7	15.4
MDUR 10.5-6	10.5 (1/8B)	3/8	9.53	7.9	7.1	22	22	17.46	32.5	50.0	22.7	17.0
MDUR 17.3-6	17.3 (3/8B)	3/8	9.53	12.7	7.1	27	30	17.46	34.5	52.2	24.5	17.0
MDUR 21.7-8	21.7 (1/2B)	1/2	12.7	16.5	10.4	30	32	22.23	36.0	56.5	26.1	23.0

MDUR

Reducing Union
Connects schedule pipe to metric tube

Part No.	A	A ₁	E	E ₁	h	H	H ₁	ℓ	L	F	F ₁
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
MDUR 13.8-12M	13.8 (1/4B)	12	10.4	9.5	22	24	22	32.0	52.8	23.3	22.9
MDUR 17.3-16M	17.3 (3/8B)	16	12.7	12.7	27	30	27	34.5	54.9	24.5	24.5
MDUR 21.7-12M	21.7 (1/2B)	12	16.5	9.5	30	32	22	36.0	56.4	26.1	22.9

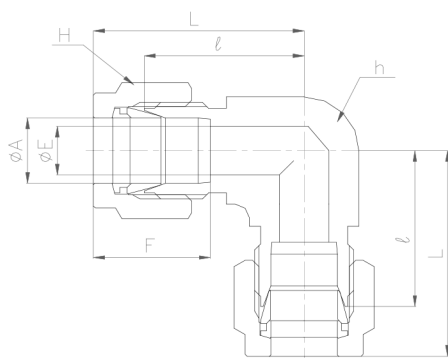
MDUR

Reducing Union
Connects schedule pipes

Part No.	A	A ₁	E	E ₁	h	H	H ₁	ℓ	L	F	F ₁
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
MDUR 13.8-10.5	13.8 (1/4B)	10.5 (1/8B)	10.4	7.9	22	24	22	32.0	52.6	23.3	22.7
MDUR 17.3-10.5	17.3 (3/8B)	10.5 (1/8B)	12.7	7.9	27	30	22	34.5	54.7	24.5	22.7
MDUR 17.3-13.8	17.3 (3/8B)	13.8 (1/4B)	12.7	10.4	27	30	24	34.5	55.3	24.5	23.3
MDUR 21.7-10.5	21.7 (1/2B)	10.5 (1/8B)	16.5	7.9	30	32	22	36.0	56.2	26.1	22.7
MDUR 21.7-13.8	21.7 (1/2B)	13.8 (1/4B)	16.5	10.4	30	32	24	36.0	56.8	26.1	23.3
MDUR 21.7-17.3	21.7 (1/2B)	17.3 (3/8B)	16.5	12.7	30	32	30	36.0	56.4	26.1	24.5

MDLA

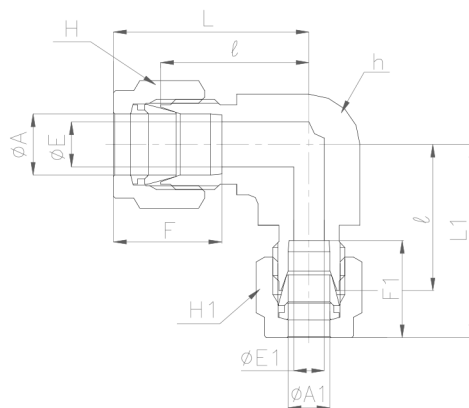
Union Elbow
Connects schedule pipes



Part No.	A	E	h	H	l	L	F
	mm	mm	mm	mm	mm	mm	mm
MDLA 10.5	10.5 (1/8 B)	7.9	22	22	27.0	37.0	22.7
MDLA 13.8	13.8 (1/4 B)	10.4	22	24	27.0	37.6	23.3
MDLA 17.3	17.3 (3/8 B)	12.7	27	30	28.2	38.4	24.5
MDLA 21.7	21.7 (1/2 B)	16.5	30	32	32.5	42.7	26.1

MDLR

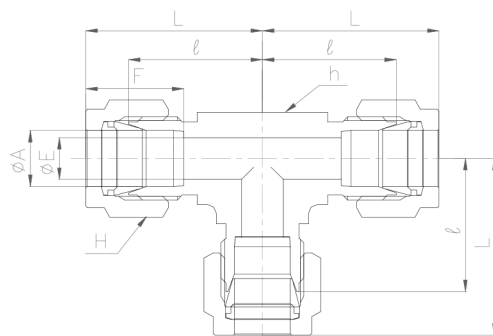
Reducing Union Elbow
Connects schedule pipes



Part No.	A	A ₁	E	E ₁	h	H	H ₁	l	L	L ₁	F	F ₁
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
MDLR13.8-10.5	13.8 (1/4B)	10.5 (1/8B)	10.4	7.9	22	24	22	27.0	37.6	37.0	23.3	22.7
MDLR17.3-10.5	17.3 (3/8B)	10.5 (1/8B)	12.7	7.9	27	30	22	28.2	38.4	38.2	24.5	22.7
MDLR17.3-13.8	17.3 (3/8B)	13.8 (1/4B)	12.7	10.4	27	30	24	28.2	38.4	38.8	24.5	23.3
MDLR21.7-10.5	21.7 (1/2B)	10.5 (1/8B)	10.5	7.9	30	32	22	32.5	42.7	42.5	26.1	22.7
MDLR21.7-13.8	21.7 (1/2B)	13.8 (1/4B)	13.8	10.4	30	32	24	32.5	42.7	43.1	26.1	23.3
MDLR21.7-17.3	21.7 (1/2B)	17.3 (3/8B)	17.3	12.7	30	32	30	32.5	42.7	42.7	26.1	24.5

MDTA

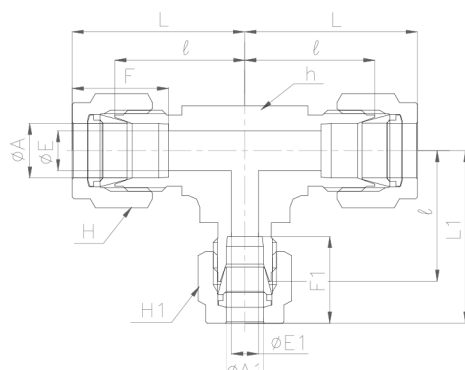
Union Tee
Connects schedule pipes



Part No.	A		E	h	H	l	L	F
	mm		mm	mm	mm	mm	mm	mm
MDTA 10.5	10.5 (1/8 B)		7.9	22	22	27.0	37.0	22.7
MDTA 13.8	13.8 (1/4 B)		10.4	22	24	27.0	37.6	23.3
MDTA 17.3	17.3 (3/8 B)		12.7	27	30	28.2	38.4	24.5
MDTA 21.7	21.7 (1/2 B)		16.5	30	32	32.5	42.7	26.1

MDTR

Reducing Union Tee
Connects schedule pipe to fractional tube



Part No.	A		A ₁		E	E ₁	h	H	H ₁	l	L	L ₁	F	F ₁
	mm		in	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
MDTR 10.5-6	10.5 (1/8B)		3/8	9.53	7.9	7.1	22	22	17.46	27.0	37.0	34.5	22.7	17.0
MDTR 21.7-8	21.7 (1/2B)		1/2	12.7	16.5	10.4	30	32	22.23	32.5	42.7	42.8	26.1	23.0

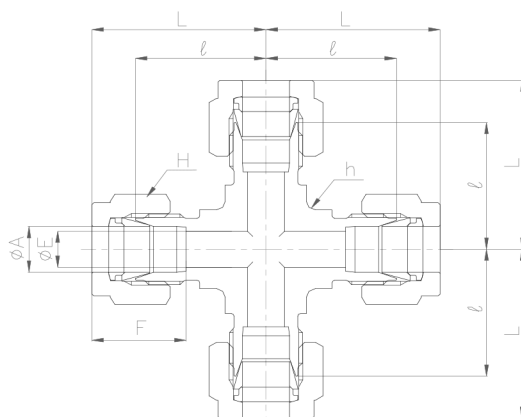
MDTR

Reducing Union Tee
Connects schedule pipes

Part No.	A		A ₁		E	E ₁	h	H	H ₁	l	L	L ₁	F	F ₁
	mm		mm		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
MDTR 13.8-10.5	13.8 (1/4B)		10.5 (1/8B)		10.4	7.9	22	24	22	27.0	37.6	37.0	23.3	22.7
MDTR 17.3-13.8	17.3 (3/8B)		13.8 (1/4B)		12.7	10.4	27	30	24	28.2	38.4	38.8	24.5	23.3
MDTR 21.7-17.3	21.7 (1/2B)		17.3 (3/8B)		16.5	12.7	30	32	30	32.5	42.7	42.7	26.1	24.5

MDXA

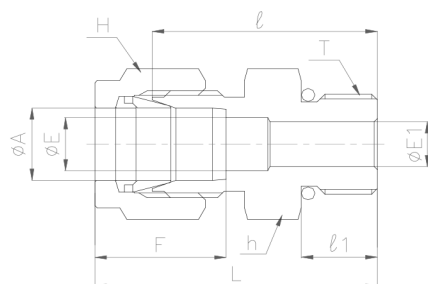
Union Cross
Connects schedule pipes



Part No.							
	A	E	h	H	l	L	F
	mm	mm	mm	mm	mm	mm	mm
MDXA 10.5	10.5 (1/8 B)	7.9	22	22	27.0	36.9	22.6
MDXA 13.8	13.8 (1/4 B)	10.4	22	24	27.0	37.1	22.8
MDXA 17.3	17.3 (3/8 B)	12.7	27	30	28.2	38.4	24.5
MDXA 21.7	21.7 (1/2 B)	16.5	30	32	32.5	44.8	26.1

MDCU

O-ring seal Male Connector for straight thread
Connects schedule port to female UNF thread



Part No.	A	T	E	E1	h	H	l	l1	L	F	O-ring
	mm	UNF	mm	mm	Hex	Hex	mm	mm	mm	mm	AS568
MDCU 10.5-4	10.5 (1/8 B)	7/16-20	7.9	5.1	22	22	27.5	9.1	37.5	22.7	904
MDCU 10.5-6	10.5 (1/8 B)	9/16-18	7.9	7.1	22	22	29.0	9.9	39.0	22.7	906
MDCU 13.8-6	13.8 (1/4 B)	9/16-18	10.4	7.1	22	24	30.0	9.9	40.6	23.3	906
MDCU 17.3-6	17.3 (3/8 B)	9/16-18	12.7	7.1	27	30	30.8	9.9	41.0	24.5	906
MDCU 17.3-8	17.3 (3/8 B)	3/4-16	12.7	10.4	27	30	32.8	11.0	43.0	24.5	908
MDCU 21.7-8	21.7 (1/2 B)	3/4-16	16.5	10.4	30	32	35.0	11.0	45.2	26.1	908

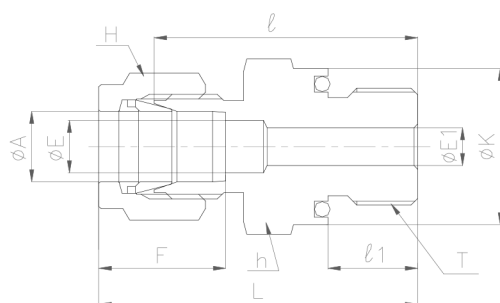
MDCU

O-ring seal Male Connector for straight thread
Connects schedule port to female ISO straight thread

Part No.	A	T	E	E1	h	H	K	l	l1	L	F	O-ring
	mm	G	mm	mm	Hex	Hex	mm	mm	mm	mm	mm	JISB2401
MDCU 10.5-G4	10.5 (1/8 B)	1/4	7.9	6.4	22	22	19	34	12	44.0	22.7	1B-P-11
MDCU 10.5-G6	10.5 (1/8 B)	3/8	7.9	7.9	22	22	22	34	12	44.0	22.7	1B-P-14
MDCU 13.8-G4	13.8 (1/4 B)	1/4	10.4	6.4	22	24	19	34	12	44.6	23.3	1B-P-11
MDCU 17.3-G6	17.3 (3/8 B)	3/8	12.7	7.9	27	30	22	35	12	45.2	24.5	1B-P-14
MDCU 17.3-G8	17.3 (3/8 B)	1/2	12.7	12.0	27	30	27	39	14	49.2	24.5	1B-P-18
MDCU 21.7-G8	21.7 (1/2 B)	1/2	16.5	12.0	30	32	27	40	14	50.2	26.1	1B-P-18

MDCO

O-ring seal Male Connector for straight thread
Connects schedule port to female UNF thread



Part No.	A	T	E	E1	K	h	H	ℓ	ℓ 1	L	F	O-ring
	mm	UNF	mm	mm	mm	Hex	Hex	mm	mm	mm	mm	AS568
MDCO 10.5-6	10.5 (1/8 B)	9/16-18	7.9	7.1	23.6	24	22	34.5	11.9	44.5	22.7	113
MDCO 13.8-6	13.8 (1/4 B)	9/16-18	10.4	7.1	23.6	24	24	34.5	11.9	45.1	23.3	113
MDCO 17.3-8	17.3 (3/8 B)	3/4-16	12.7	10.4	28.4	30	30	36.0	11.9	46.2	24.5	116
MDCO 21.7-8	21.7 (1/2 B)	3/4-16	16.5	10.4	28.4	30	32	36.0	11.9	46.2	26.1	116

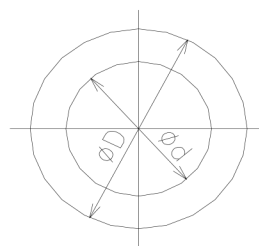
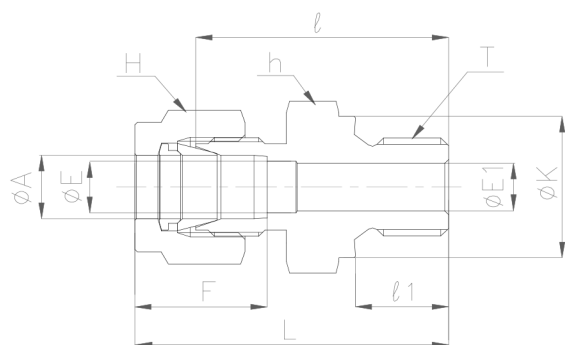
MDCO

O-ring seal Male Connector for straight thread
Connects schedule port to female ISO straight thread

Part No.	A	T	E	E1	h	H	K	ℓ	ℓ 1	L	F	O-ring
	mm	G	mm	mm	Hex	Hex	mm	mm	mm	mm	mm	JISB2401
MDCO 10.5-G4	10.5 (1/8 B)	1/4	7.9	6.4	24	22	23.5	35.5	12	45.5	22.7	4D-P-15
MDCO 10.5-G6	10.5 (1/8 B)	3/8	7.9	7.9	27	22	26.5	35.5	12	45.5	22.7	4D-P-18
MDCO 10.5-G8	10.5 (1/8 B)	1/2	7.9	12.0	32	22	31.5	39.5	14	49.5	22.7	4D-P-22
MDCO 13.8-G6	13.8 (1/4 B)	3/8	10.4	7.9	27	24	26.5	35.5	12	46.1	23.3	4D-P-18
MDCO 13.8-G8	13.8 (1/4 B)	1/2	10.4	12.0	32	24	31.5	39.5	14	50.1	23.3	4D-P-22
MDCO 17.3-G6	17.3 (3/8 B)	3/8	12.7	7.9	27	30	26.5	36.5	12	46.7	24.5	4D-P-18
MDCO 17.3-G8	17.3 (3/8 B)	1/2	12.7	12.0	32	30	31.5	40.5	14	50.7	24.5	4D-P-22
MDCO 21.7-G8	21.7 (1/2 B)	1/2	16.5	12.0	32	32	31.5	40.5	14	50.7	26.1	4D-P-22
MDCO 21.7-G12	21.7 (1/2 B)	3/4	16.5	16.0	41	32	40.5	45.5	18	55.7	26.1	4D-P-28

MDCJ

Gasket seal Male Connector for straight thread
Connects schedule port to female ISO straight thread



Gasket

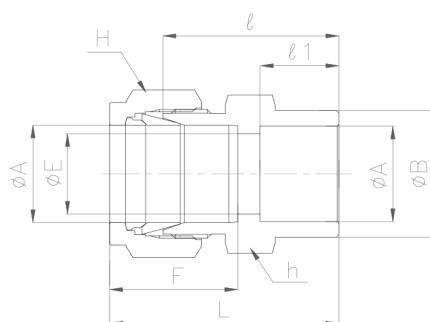
Material : Copper

Part No.	T	D	d	t
KP-A-03	G1/4	22	14	2
KP-A-05	G3/8	26	17	2
KP-A-07	G1/2	32	21.5	2

Part No.	A	T	E	E1	h	H	K	ℓ	ℓ ₁	L	F
	mm	G	mm	mm	Hex	Hex	mm	mm	mm	mm	mm
MDCJ 10.5-G4	10.5 (1/8 B)	1/4	7.9	5.9	22	22	18.0	33.0	11.2	43.0	22.7
MDCJ 10.5-G6	10.5 (1/8 B)	3/8	7.9	7.9	22	22	21.8	33.0	11.2	43.0	22.7
MDCJ 10.5-G8	10.5 (1/8 B)	1/2	7.9	11.9	27	22	26.0	38.9	14.2	48.9	22.7
MDCJ 13.8-G4	13.8 (1/4 B)	1/4	10.4	5.9	22	24	18.0	33.0	11.2	43.6	23.3
MDCJ 13.8-G6	13.8 (1/4 B)	3/8	10.4	7.9	22	24	21.8	33.0	11.2	43.6	23.3
MDCJ 13.8-G8	13.8 (1/4 B)	1/2	10.4	11.9	27	24	26.0	38.9	14.2	49.5	23.3
MDCJ 17.3-G4	17.3 (3/8 B)	1/4	12.7	5.9	27	30	18.0	34.9	11.2	45.1	24.5
MDCJ 17.3-G6	17.3 (3/8 B)	3/8	12.7	7.9	27	30	21.8	34.9	11.2	45.1	24.5
MDCJ 17.3-G8	17.3 (3/8 B)	1/2	12.7	11.9	27	30	26.0	38.9	14.2	49.1	24.5
MDCJ 21.7-G4	21.7 (1/2 B)	1/4	16.5	5.9	30	32	18.0	36.9	11.2	47.1	26.1
MDCJ 21.7-G6	21.7 (1/2 B)	3/8	16.5	7.9	30	32	21.8	36.9	11.2	47.1	26.1
MDCJ 21.7-G8	21.7 (1/2 B)	1/2	16.5	11.9	30	32	26.0	40.9	14.2	51.1	26.1

MDCW

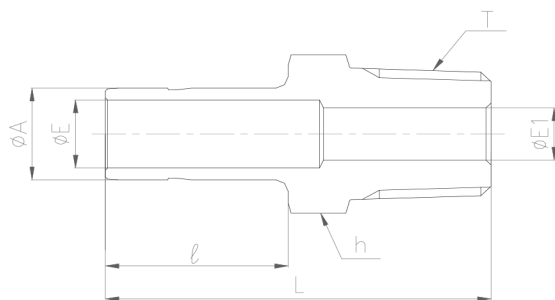
Tube socket weld Connector
Connects schedule pipes



Part No.	A	E	h	H	B	ℓ	ℓ ₁	L	F
	mm	mm	mm	mm	mm	mm	mm	mm	mm
MDCW 10.5-10.5	10.5 (1/8 B)	7.9	22	22	20	32.0	10.0	42.0	22.7
MDCW 13.8-13.8	13.8 (1/4 B)	10.4	22	24	20	32.0	12.7	42.6	23.3
MDCW 17.3-17.3	17.3 (3/8 B)	12.7	27	30	26	34.6	14.0	44.8	24.5
MDCW 21.7-21.7	21.7 (1/2 B)	16.5	32	32	29	36.0	14.0	46.2	26.1

BI-LoK**MDHA****Male Adapter**

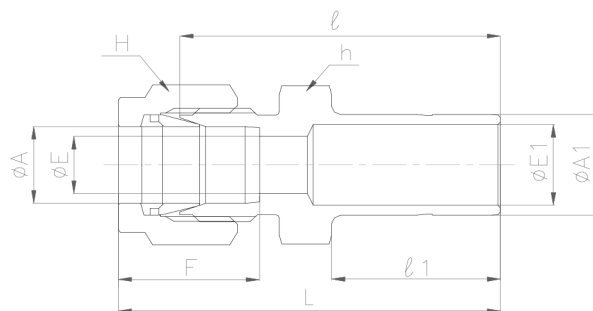
Connects schedule port to female ISO tapered pipe thread



Part No.	A	T	E	E1	h	l	L
	mm	R	mm	mm	Hex	mm	mm
MDHA 10.5-R4	10.5 (1/8 B)	1/4	7.9	7.1	14	23.5	44
MDHA 10.5-R6	10.5 (1/8 B)	3/8	7.9	7.9	19	23.5	44
MDHA 13.8-R4	13.8 (1/4 B)	1/4	10.4	7.1	17	23.5	45
MDHA 13.8-R6	13.8 (1/4 B)	3/8	10.4	10.4	19	23.5	45
MDHA 17.3-R6	17.3 (3/8 B)	3/8	12.7	10.4	19	25.2	48
MDHA 17.3-R8	17.3 (3/8 B)	1/2	12.7	12.7	22	25.2	51
MDHA 21.7-R6	21.7 (1/2 B)	3/8	16.5	10.4	24	27.0	50
MDHA 21.7-R8	21.7 (1/2 B)	1/2	16.5	12.7	24	27.0	54

MDRE**Reducer**

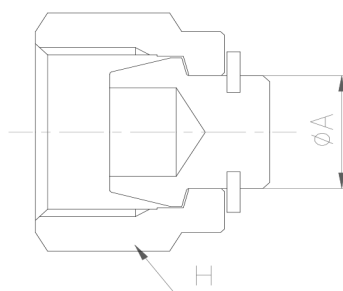
Connects schedule pipe to schedule port



Part No.	A (Tube OD)	A1 (Tube OD)	E	E1	h	H	l	l ₁	L	F
	mm	mm	mm	mm	Hex	Hex	mm	mm	mm	mm
MDRE 10.5-13.8	10.5 (1/8 B)	13.8 (1/4 B)	7.9	10.4	22	22	43.0	23.5	53.0	22.7
MDRE 13.8-10.5	13.8 (1/4 B)	10.5 (1/8 B)	10.4	7.9	22	24	43.2	23.5	53.8	23.3
MDRE 13.8-17.3	13.8 (1/4 B)	17.3 (3/8 B)	10.4	12.0	22	24	45.0	25.2	55.6	23.3
MDRE 17.3-13.8	17.3 (3/8 B)	13.8 (1/4 B)	12.7	10.4	27	30	43.5	23.5	53.7	24.5
MDRE 17.3-21.7	17.3 (3/8 B)	21.7 (1/2 B)	12.7	16.5	27	30	47.0	27.0	57.2	24.5
MDRE 21.7-17.3	13.8 (1/4 B)	17.3 (3/8 B)	16.5	12.7	30	32	45.0	25.2	55.2	26.1

MDBA

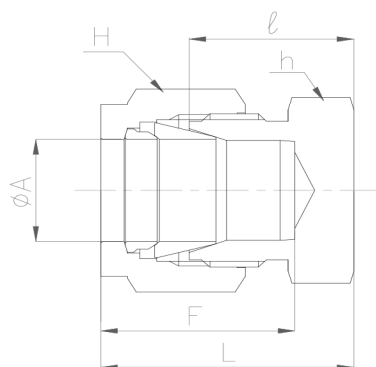
Plug
Schedule pipe



Part No.	A	h (Hex)	Snap ring
	mm	mm	
MDBA 10.5	10.5 (1/8B)	22	E Type (JIS B2805-8)
MDBA 13.8	13.8 (1/4B)	24	E Type (JIS B2805-12)
MDBA 17.3	17.3 (3/8B)	30	C Type (JIS B2804-17)
MDBA 21.7	21.7 (1/2B)	32	E Type (US-81S)

MDCA

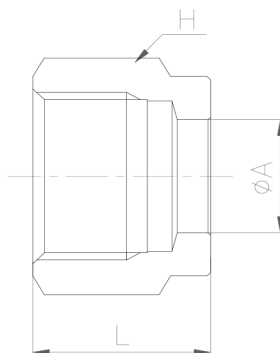
Cap
Caps end of Schedule pipe



Part No.	A	h (Hex)	H	ℓ	L	F
	mm	mm	mm	mm	mm	mm
MDCA 10.5	10.5 (1/8B)	22	22	19.8	29.8	22.7
MDCA 13.8	13.8 (1/4B)	22	24	19.8	30.4	23.3
MDCA 17.3	17.3 (3/8B)	27	30	22.0	32.2	24.5
MDCA 21.7	21.7 (1/2B)	30	32	22.3	32.5	26.1

MDNA

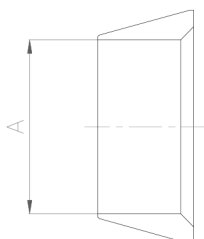
Nut
Schedule pipe



Part No.	A mm	H (Hex) mm	L mm	M (UNF)
MDNA 10.5	10.5 (1/8B)	22	17.5	3/4-20UNEF
MDNA 13.8	13.8 (1/4B)	24	17.4	13/16-20UNEF
MDNA 17.3	17.3 (3/8B)	30	17.4	1-20UNEF
MDNA 21.7	21.7 (1/2B)	32	17.4	1-1/8-20UN

MDOF

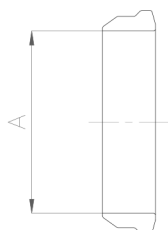
Front Ferrule
Schedule pipe



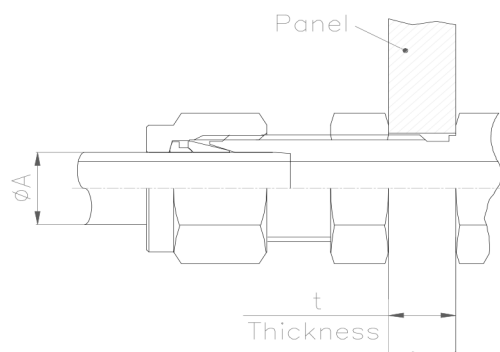
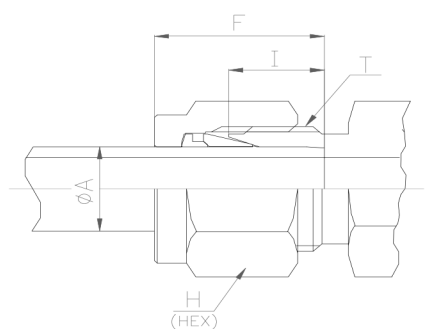
Part No.	A mm
MDOF 10.5	10.5 (1/8B)
MDOF 13.8	13.8 (1/4B)
MDOF 17.3	17.3 (3/8B)
MDOF 21.7	21.7 (1/2B)

MDOB

Back Ferrule
Schedule pipe



Part No.	A mm
MDOB 10.5	10.5 (1/8B)
MDOB 13.8	13.8 (1/4B)
MDOB 17.3	17.3 (3/8B)
MDOB 21.7	21.7 (1/2B)



Fractional tube series

Tube end dimensional data								Panel size for Bulkhead	
Nominal Size	A (Tube O.D)		T Unify Straight thread	I	H (Hex)		F	Panel Hole Drill dia	Panel wall thickness(t)
	in	mm			in	mm			
1	1/16	1.59	10-32	4.9	5/16	7.94	8.9	5.2	3.0
2	1/8	3.18	5/16-20	6.4	7/16	11.11	13.0	8.3	12.7
3	3/16	4.76	3/8-20	7.2	1/2	12.7	13.8	9.9	12.7
4	1/4	6.35	7/16-20	7.9	9/16	14.29	15.4	11.5	10.2
5	5/16	7.94	1/2-20	8.8	5/8	15.88	16.3	13.1	10.9
6	3/8	9.53	9/16-20	9.5	11/16	17.46	17.0	14.7	11.2
8	1/2	12.7	3/4-20	12.7	7/8	22.23	23.0	19.4	12.7
10	5/8	15.88	7/8-20	14.3	1	25.4	24.6	22.6	12.7
12	3/4	19.05	1-20	14.3	1-1/8	28.58	24.6	25.8	16.8
14	7/8	22.23	1-1/8-20	15.9	1-1/4	31.75	26.1	29.0	19.6
16	1	25.4	1-5/16-20	19.1	1-1/2	38.1	31.6	33.7	19.1

Metric tube series

Tube end dimensional data						Panel size for Bulkhead	
Nominal Size	A (Tube O.D)	T Unify Straight	I	H (Hex)	F	Panel Hole Drill dia	.Panel wall thickness(t)
	mm	thread	mm	mm	mm	mm	mm
2M	2	1/4-24	5.5	1 2	11.1	6.7	3.0
3M	3	5/16-20	6.4	1 2	13.0	8.3	12.7
4M	4	3/8-20	7.2	1 3	13.9	9.9	10.4
6M	6	7/16-20	7.9	1 4	15.4	11.5	9.7
8M	8	1/2-20	8.8	1 7	16.3	13.1	11.4
10M	1 0	5/8-20	9.5	1 9	17.3	16.3	11.6
12M	1 2	3/4-20	12.7	2 2	22.9	19.4	13.1
15M	1 5	7/8-20	14.3	2 7	24.3	22.6	12.0
16M	1 6	7/8-20	14.3	2 7	24.5	22.6	12.0
18M	1 8	1-20	14.3	3 0	24.5	25.8	16.7
20M	2 0	1-1/16-20	14.3	3 0	24.5	27.0	16.7
22M	2 2	1-1/8-20	15.9	3 2	26.1	29.0	16.7
25M	2 5	1-5/16-20	19.1	4 1	31.6	33.7	20.0

Schedule pipe series

Tube end dimensional data							Panel size for Bulkhead	
Nominal Size	A (Tube O.D)		T Unify Straight thread	I	H (Hex)	F	Panel Hole Drill dia	.Panel wall thickness(t)
	in	mm		mm	mm	mm	mm	mm
10.5	1/8 B	10.5	3/4-20	12.7	2 2	22.7	19.4	11.1
13.8	1/4 B	13.8	13/16-20	12.7	2 4	23.3	21.0	12.1
17.3	3/8 B	17.3	1-20	14.3	3 0	24.5	25.8	14.9
21.7	1/2 B	21.7	1-1/8-20	15.9	3 2	26.1	29.0	19.5

