

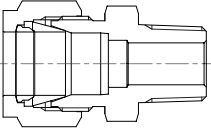
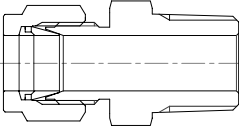
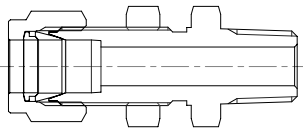
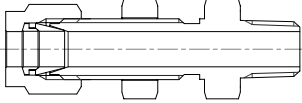
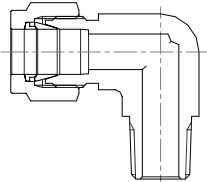
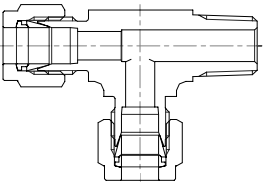
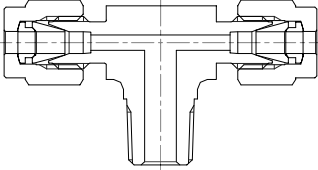
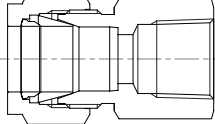
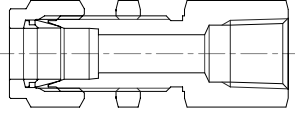
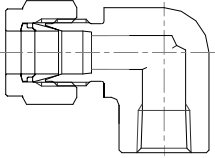
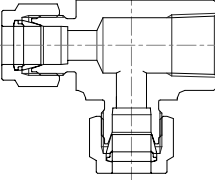
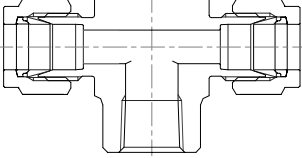
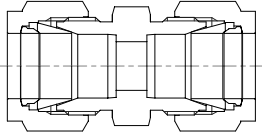
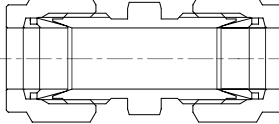
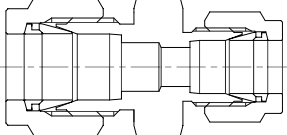
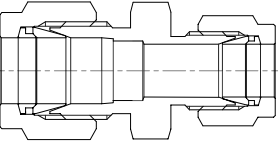
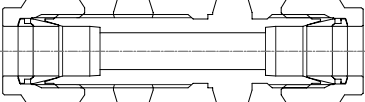
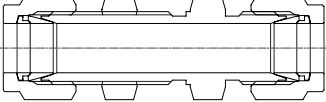
**DOUBLE FERRULE TYPE  
TUBE FITTINGS**

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

**FRACTIONAL SERIES**

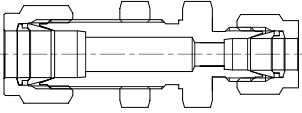
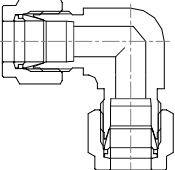
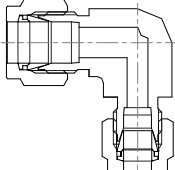
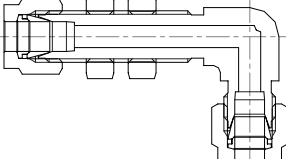
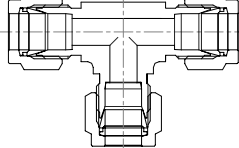
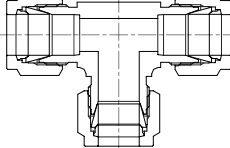
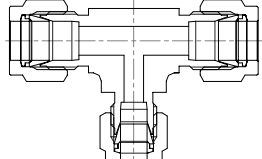
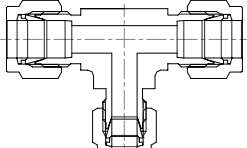
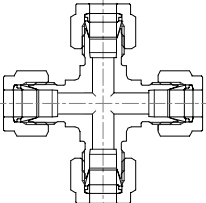
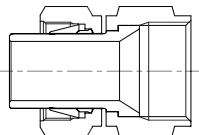
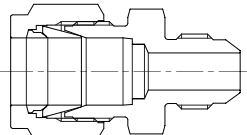
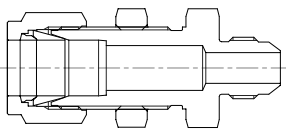
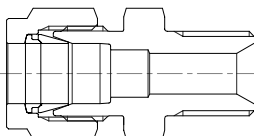
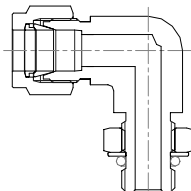
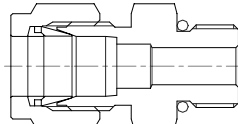
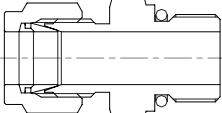
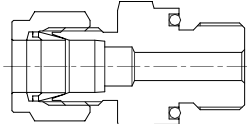
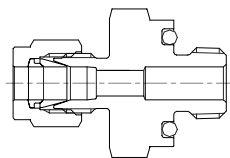
**BRASS AND STAINLESS STEEL TUBE**

## Visual Index

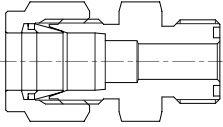
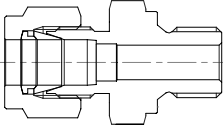
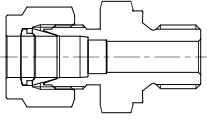
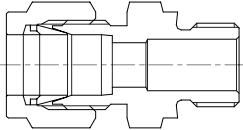
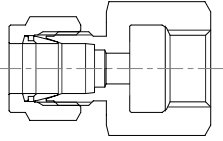
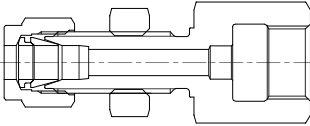
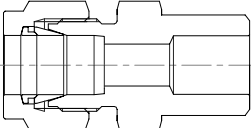
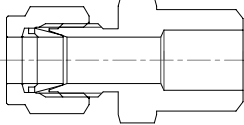
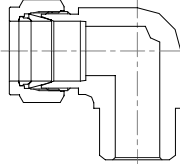
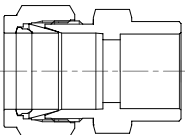
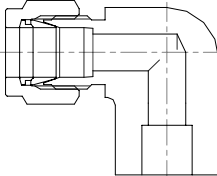
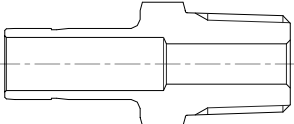
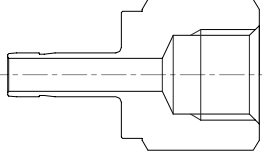
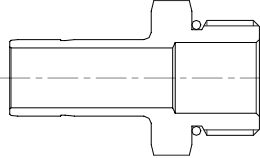
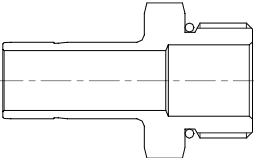
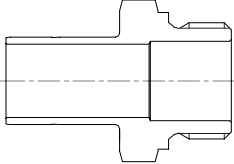
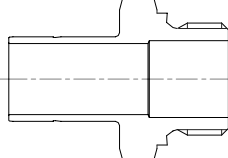
<b>5</b>	<b>DCT</b> Male Connector	<b>7</b>	<b>DCTZ</b> Male Connector/Bored thru	<b>8</b>	<b>DSC</b> Bulkhead Male Connector
					
<b>9</b>	<b>DSCZ</b> Bulkhead Male Connector /Bored thru	<b>9</b>	<b>DLN</b> Male Elbow	<b>11</b>	<b>DTK</b> Male Run Tee
					
<b>12</b>	<b>DTN</b> Male Branch Tee	<b>13</b>	<b>DSA</b> Female Connector	<b>14</b>	<b>DSS</b> Bulkhead Female Connector
					
<b>15</b>	<b>DLF</b> Female Elbow	<b>16</b>	<b>DTF</b> Female Run Tee	<b>17</b>	<b>DTH</b> Female Branch Tee
					
<b>18</b>	<b>DUA</b> Union	<b>19</b>	<b>DUAZ</b> Union/Bored thru	<b>19</b>	<b>DUR</b> Reducing Union
					
<b>20</b>	<b>DURZ</b> Reducing Union/Bored thru	<b>20</b>	<b>DSU</b> Bulkhead Union	<b>21</b>	<b>DSUZ</b> Bulkhead Union/Bored thru
					

Please be advised that the contents of this catalogue may be revised without notice when improvements or modifications are made on the items.

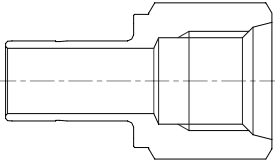
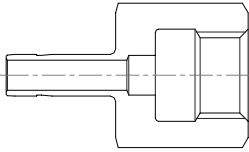
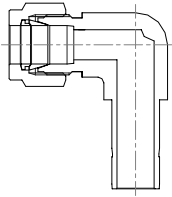
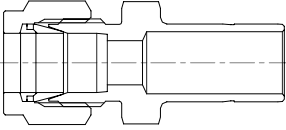
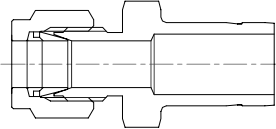
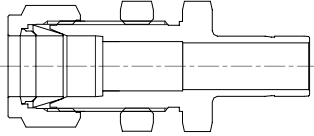
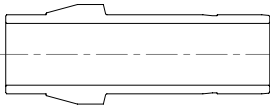
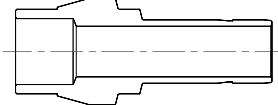
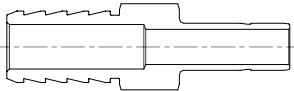
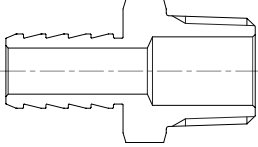
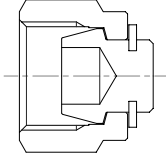
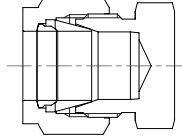

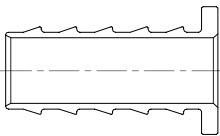
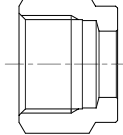

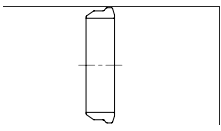
## Visual Index

<p><b>21</b> <b>DSUR</b> Bulkhead Reducing Union</p> 	<p><b>22</b> <b>DLA</b> Union Elbow</p> 	<p><b>23</b> <b>DLR</b> Reducing Union Elbow</p> 
<p><b>23</b> <b>DSL</b> Bulkhead Union Elbow</p> 	<p><b>24</b> <b>DTA</b> Union Tee</p> 	<p><b>24</b> <b>DTAZ</b> Union Tee/Bored thru</p> 
<p><b>25</b> <b>DTR</b> Reducing Union Tee</p> 	<p><b>25</b> <b>DTRZ</b> Reducing Union Tee /Bored thru</p> 	<p><b>26</b> <b>DXA</b> Union Cross</p> 
<p><b>26</b> <b>DAN</b> Bi-lok to AN Adapter</p> 	<p><b>27</b> <b>DUC</b> AN Union</p> 	<p><b>27</b> <b>DUE</b> AN Bulkhead Union</p> 
<p><b>28</b> <b>DUD</b> Male Connector for 30° Hose adapter</p> 	<p><b>29</b> <b>DLO</b> Positional Male Elbow</p> 	<p><b>30</b> <b>DCU</b> O-ring seal Male Connector for straight thread</p> 
<p><b>31</b> <b>DCUZ</b> O-ring seal Male Connector /Bored thru</p> 	<p><b>32</b> <b>DCO</b> O-ring seal Male Connector for straight thread</p> 	<p><b>33</b> <b>DCM</b> O-ring seal Male Connector for pipe tapered thread</p> 

## Visual Index

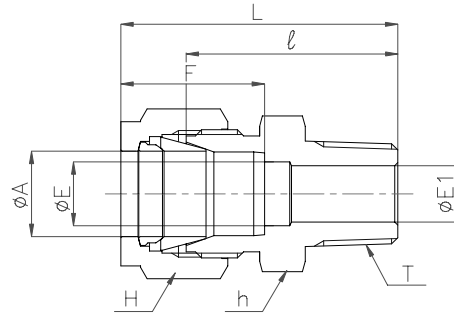
<p><b>33</b> <b>DCF</b> O-ring seal Male Connector for straight thread</p> 	<p><b>34</b> <b>DCQ</b> Bonded seal Male Connector for straight thread</p> 	<p><b>35</b> <b>DCJ</b> Gasket seal Male Connector for straight thread</p> 
<p><b>35</b> <b>DCG</b> Gasket seal Male Connector for straight thread</p> 	<p><b>36</b> <b>DGA</b> Gauge Connector</p> 	<p><b>36</b> <b>DGB</b> Bulkhead Gauge Connector</p> 
<p><b>37</b> <b>DCB</b> Male pipe weld Connector</p> 	<p><b>38</b> <b>DCBZ</b> Male pipe weld Connector Bored thru</p> 	<p><b>38</b> <b>DLB</b> Male pipe weld Elbow</p> 
<p><b>39</b> <b>DCW</b> Tube socket weld Connector</p> 	<p><b>39</b> <b>DLW</b> Tube socket weld Elbow</p> 	
<p><b>40</b> <b>DHA</b> Male Adapter</p> 	<p><b>41</b> <b>DHC</b> Female Adapter</p> 	<p><b>42</b> <b>DHO</b> O-ring seal Male Adapter for straight thread</p> 
<p><b>42</b> <b>DHB</b> O-ring seal Male Adapter for straight thread</p> 	<p><b>43</b> <b>DHQ</b> Bonded seal Male Adapter for straight thread</p> 	<p><b>43</b> <b>DHJ</b> Gasket seal Male Adapter for straight thread</p> 

## Visual Index

<p><b>44</b> <b>DHF</b> Gauge Adapter</p> 	<p><b>44</b> <b>DHG</b> Gauge Adapter</p> 	<p><b>45</b> <b>DLH</b> Elbow Adapter</p> 
<p><b>45</b> <b>DRE</b> Reducer</p> 	<p><b>47</b> <b>DREZ</b> Reducer / Bored thru</p> 	<p><b>48</b> <b>DSE</b> Bulkhead Reducer</p> 
<p><b>49</b> <b>DPC</b> Port Connector</p> 	<p><b>49</b> <b>DPC</b> Reducing Port Connector</p> 	<p><b>50</b> <b>DAH</b> Hose Adapter</p> 
<p><b>50</b> <b>DAT</b> Hose Adapter</p> 	<p><b>51</b> <b>DBA</b> Plug</p> 	<p><b>51</b> <b>DCA</b> Cap</p> 
<p><b>51</b> <b>DNN</b> Lock Nut</p> 	<p><b>52</b> <b>DTI</b> Insert (Saw type)</p> 	<p><b>53</b> <b>DNA</b> Nut</p> 
<p><b>53</b> <b>DOF</b> Front Ferrule</p> 	<p><b>53</b> <b>DOB</b> Back Ferrule</p> 	<p><b>54</b> <b>Tube end dimensional data</b></p>

# DCT

**Male Connector**  
Connects fractional tube to female tapered pipe thread



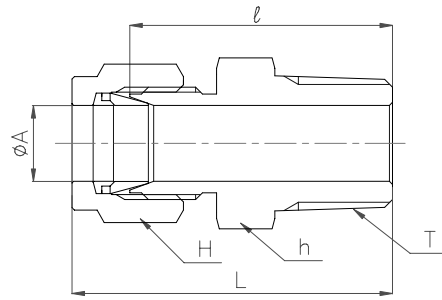
H : See dimensional data (Last page)

Part No.		A (Tube O. D.)		T	E	E <sub>1</sub>	h (HEX)		ℓ	L	F
ANSI NPT	ISO/JIS R	in	mm	NPT/R	mm	mm	in	mm	mm	mm	mm
DCT 1-1		1/16	1.59	1/16	1.3	3.0	5/16	7.94	20.0	24.0	8.9
DCT 1-2	DCT 1-R2	1/16	1.59	1/8	1.3	4.8	7/16	11.11	21.5	25.5	8.9
DCT 1-4	DCT 1-R4	1/16	1.59	1/4	1.3	7.1	9/16	14.29	26.9	30.9	8.9
	DCT 1-R6	1/16	1.59	3/8	1.3	10.4	11/16	17.46	28.8	32.8	8.9
DCT 2-1		1/8	3.18	1/16	2.3	3.0	7/16	11.11	23.1	29.8	13.0
DCT 2-2	DCT 2-R2	1/8	3.18	1/8	2.3	4.8	7/16	11.11	23.1	29.8	13.0
DCT 2-4		1/8	3.18	1/4	2.3	7.1	9/16	14.29	28.5	35.2	13.0
	DCT 2-R4	1/8	3.18	1/4	2.3	4.8	9/16	14.29	28.5	35.2	13.0
DCT 2-6	DCT 2-R6	1/8	3.18	3/8	2.3	10.4	11/16	17.46	29.4	36.1	13.0
DCT 2-8	DCT 2-R8	1/8	3.18	1/2	2.3	12.7	7/8	22.23	35.0	41.7	13.0
DCT 3-2	DCT 3-R2	3/16	4.76	1/8	3.0	3.0	7/16	11.11	24.0	30.7	13.8
DCT 3-4	DCT 3-R4	3/16	4.76	1/4	3.0	3.0	9/16	14.29	29.5	36.2	13.8
DCT 3-6		3/16	4.76	3/8	3.0	3.0	11/16	17.46	30.0	36.7	13.8
DCT 3-8		3/16	4.76	1/2	3.0	12.7	7/8	22.23	35.8	42.5	13.8
DCT 4-1		1/4	6.35	1/16	4.8	3.0	1/2	12.7	25.4	32.9	15.4
DCT 4-2	DCT 4-R2	1/4	6.35	1/8	4.8	4.8	1/2	12.7	25.4	32.9	15.4
DCT 4-4	DCT 4-R4	1/4	6.35	1/4	4.8	4.8	9/16	14.29	30.3	37.8	15.4
DCT 4-6		1/4	6.35	3/8	4.8	4.8	11/16	17.46	31.0	38.5	15.4
	DCT 4-R6	1/4	6.35	3/8	4.8	4.8	11/16	17.46	32.0	39.5	15.4
DCT 4-8	DCT 4-R8	1/4	6.35	1/2	4.8	4.8	7/8	22.23	36.6	44.1	15.4
DCT 4-12		1/4	6.35	3/4	4.8	4.8	1-1/16	26.99	37.4	44.9	15.4
	DCT 4-R12	1/4	6.35	3/4	4.8	4.8	1-1/16	26.99	39.4	46.9	15.4
DCT 4-16		1/4	6.35	1	4.8	4.8	1-3/8	34.93	46.0	53.5	15.4
DCT 5-2	DCT 5-R2	5/16	7.94	1/8	6.4	4.8	9/16	14.29	26.7	34.2	16.3
DCT 5-4	DCT 5-R4	5/16	7.94	1/4	6.4	6.4	9/16	14.29	31.3	38.8	16.3
DCT 5-6		5/16	7.94	3/8	6.4	6.4	11/16	17.46	31.8	39.3	16.3
	DCT 5-R6	5/16	7.94	3/8	6.4	6.4	11/16	17.46	32.8	40.3	16.3
DCT 5-8	DCT 5-R8	5/16	7.94	1/2	6.4	6.4	7/8	22.23	37.3	44.8	16.3
DCT 5-12		5/16	7.94	3/4	6.4	6.4	1-1/16	26.99	38.2	45.7	16.3
DCT 6-2	DCT 6-R2	3/8	9.53	1/8	7.1	4.8	5/8	15.88	27.7	35.2	17.0
DCT 6-4	DCT 6-R4	3/8	9.53	1/4	7.1	7.1	5/8	15.88	32.5	40.0	17.0
DCT 6-6		3/8	9.53	3/8	7.1	7.1	11/16	17.46	32.5	40.0	17.0
	DCT 6-R6	3/8	9.53	3/8	7.1	7.1	11/16	17.46	33.5	41.0	17.0
DCT 6-8	DCT 6-R8	3/8	9.53	1/2	7.1	7.1	7/8	22.23	38.1	45.6	17.0
DCT 6-12		3/8	9.53	3/4	7.1	7.1	1-1/16	26.99	39.0	46.5	17.0
	DCT 6-R12	3/8	9.53	3/4	7.1	7.1	1-1/16	26.99	41.0	48.5	17.0

Part No.		A (Tube O. D)		T	E	E <sub>1</sub>	h (HEX)		ℓ	L	F
ANSI NPT	ISO/JIS R	in	mm	NPT/R	mm	mm	in	mm	mm	mm	mm
DCT 8-2	DCT 8-R2	1/2	12.7	1/8	10.4	4.8	13/16	20.64	28.4	38.7	23.0
DCT 8-4	DCT 8-R4	1/2	12.7	1/4	10.4	7.1	13/16	20.64	33.3	43.6	23.0
DCT 8-6		1/2	12.7	3/8	10.4	10.4	13/16	20.64	33.3	43.6	23.0
	DCT 8-R6	1/2	12.7	3/8	10.4	10.4	13/16	20.64	34.3	44.6	23.0
DCT 8-8	DCT 8-R8	1/2	12.7	1/2	10.4	10.4	7/8	22.23	38.1	48.4	23.0
DCT 8-12		1/2	12.7	3/4	10.4	10.4	1-1/16	26.99	39.0	49.3	23.0
	DCT 8-R12	1/2	12.7	3/4	10.4	10.4	1-1/16	26.99	41.0	51.3	23.0
DCT 8-16		1/2	12.7	1	10.4	10.4	1-3/8	34.93	47.6	57.9	23.0
	DCT 10-R2	5/8	15.88	1/8	12.7	4.8	15/16	23.81	30.0	40.3	24.6
DCT 10-4	DCT 10-R4	5/8	15.88	1/4	12.7	7.1	15/16	23.81	34.0	44.3	24.6
DCT 10-6		5/8	15.88	3/8	12.7	10.4	15/16	23.81	34.0	44.3	24.6
	DCT 10-R6	5/8	15.88	3/8	12.7	10.4	15/16	23.81	35.0	45.3	24.6
DCT 10-8	DCT 10-R8	5/8	15.88	1/2	12.7	12.7	15/16	23.81	39.0	49.3	24.6
DCT 10-12		5/8	15.88	3/4	12.7	12.7	1-1/16	26.99	38.9	49.2	24.6
	DCT 10-R12	5/8	15.88	3/4	12.7	12.7	1-1/16	26.99	40.9	51.2	24.6
DCT 12-4	DCT 12-R4	3/4	19.05	1/4	15.8	7.1	1-1/16	26.99	35.4	45.7	24.6
DCT 12-6		3/4	19.05	3/8	15.8	10.4	1-1/16	26.99	35.4	45.7	24.6
	DCT 12-R6	3/4	19.05	3/8	15.8	10.4	1-1/16	26.99	36.4	46.7	24.6
DCT 12-8	DCT 12-R8	3/4	19.05	1/2	15.8	12.7	1-1/16	26.99	40.4	50.7	24.6
DCT 12-12		3/4	19.05	3/4	15.8	15.8	1-1/16	26.99	40.4	50.7	24.6
	DCT 12-R12	3/4	19.05	3/4	15.8	15.8	1-1/16	26.99	42.4	52.7	24.6
DCT 12-16	DCT 12-R16	3/4	19.05	1	15.8	15.8	1-3/8	34.93	47.6	57.9	24.6
DCT 14-8	DCT 14-R8	7/8	22.23	1/2	18.3	12.7	1-3/16	30.16	40.4	50.6	26.1
DCT 14-12		7/8	22.23	3/4	18.3	18.3	1-3/16	30.16	40.4	50.6	26.1
	DCT 14-R12	7/8	22.23	3/4	18.3	18.3	1-3/16	30.16	42.4	52.6	26.1
DCT 14-16	DCT 14-R16	7/8	22.23	1	18.3	18.3	1-3/8	34.93	47.6	57.8	26.1
	DCT 16-R6	1	25.4	3/8	22.5	9.0	1-3/8	34.93	43.5	56.1	31.6
DCT 16-8	DCT 16-R8	1	25.4	1/2	22.5	12.7	1-3/8	34.93	45.0	57.6	31.6
DCT 16-12		1	25.4	3/4	22.5	18.3	1-3/8	34.93	45.0	57.6	31.6
	DCT 16-R12	1	25.4	3/4	22.5	18.3	1-3/8	34.93	47.0	59.6	31.6
DCT 16-16	DCT 16-R16	1	25.4	1	22.5	22.5	1-3/8	34.93	50.0	62.6	31.6

# DCTZ

**Male Connector / Bored-through**  
Connects fractional tube to female tapered pipe thread



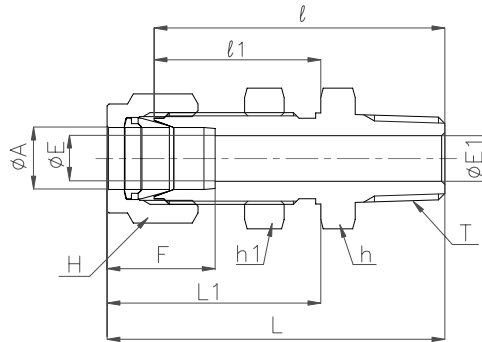
H : See dimensional data(Last page)

Part No.		A(Tube O. D)		T	h(HEX)		ℓ	L
ANSI NPT	ISO/JIS R	in	mm	NPT/R	in	mm	mm	mm
DCTZ 1-1		1/16	1.59	1/16	5/16	7.94	20.0	24.0
DCTZ 1-2	DCTZ 1-R2	1/16	1.59	1/8	7/16	11.11	21.5	25.5
DCTZ 1-4	DCTZ 1-R4	1/16	1.59	1/4	9/16	14.29	26.9	30.9
DCTZ 2-1		1/8	3.18	1/16	7/16	11.11	23.1	29.8
DCTZ 2-2	DCTZ 2-R2	1/8	3.18	1/8	7/16	11.11	23.1	29.8
DCTZ 2-4	DCTZ 2-R4	1/8	3.18	1/4	9/16	14.29	28.5	35.2
DCTZ 2-6		1/8	3.18	3/8	11/16	17.46	29.4	36.1
	DCTZ 2-R6	1/8	3.18	3/8	11/16	17.46	30.4	37.1
DCTZ 2-8		1/8	3.18	1/2	7/8	22.23	35.0	41.7
	DCTZ 2-R8	1/8	3.18	1/2	7/8	22.23	34.9	41.6
DCTZ 3-2	DCTZ 3-R2	3/16	4.76	1/8	7/16	11.11	24.0	30.7
DCTZ 3-4	DCTZ 3-R4	3/16	4.76	1/4	9/16	14.29	29.5	36.2
	DCTZ 3-R6	3/16	4.76	3/8	11/16	17.46	31.2	37.9
	DCTZ 3-R8	3/16	4.76	1/2	7/8	22.23	35.8	42.5
DCTZ 4-2	DCTZ 4-R2	1/4	6.35	1/8	1/2	12.7	25.4	32.9
DCTZ 4-4	DCTZ 4-R4	1/4	6.35	1/4	9/16	14.29	30.3	37.8
DCTZ 4-6		1/4	6.35	3/8	11/16	17.46	31.0	38.5
	DCTZ 4-R6	1/4	6.35	3/8	11/16	17.46	32.0	39.5
DCTZ 4-8		1/4	6.35	1/2	7/8	22.23	36.6	44.1
	DCTZ 4-R8	1/4	6.35	1/2	7/8	22.23	36.5	44.0
DCTZ 5-4	DCTZ 5-R4	5/16	7.94	1/4	9/16	14.29	31.3	38.8
DCTZ 5-6	DCTZ 5-R6	5/16	7.94	3/8	11/16	17.46	31.8	39.3
DCTZ 5-8	DCTZ 5-R8	5/16	7.94	1/2	7/8	22.23	37.3	44.8
DCTZ 6-4	DCTZ 6-R4	3/8	9.53	1/4	5/8	15.88	32.5	40.0
DCTZ 6-6		3/8	9.53	3/8	11/16	17.46	32.5	40.0
	DCTZ 6-R6	3/8	9.53	3/8	11/16	17.46	33.5	41.0
DCTZ 6-8	DCTZ 6-R8	3/8	9.53	1/2	7/8	22.23	38.1	45.6
DCTZ 8-6		1/2	12.7	3/8	13/16	20.64	33.3	43.6
	DCTZ 8-R6	1/2	12.7	3/8	13/16	20.64	34.3	44.6
DCTZ 8-8	DCTZ 8-R8	1/2	12.7	1/2	7/8	22.23	38.1	48.4
DCTZ 8-12		1/2	12.7	3/4	1-1/16	26.99	39.0	49.3
	DCTZ 8-R12	1/2	12.7	3/4	1-1/16	26.99	41.0	51.3
DCTZ 10-8	DCTZ 10-R8	5/8	15.88	1/2	15/16	23.81	39.0	49.3
DCTZ 10-12		5/8	15.88	3/4	1-1/16	26.99	38.9	49.2
	DCTZ 10-R12	5/8	15.88	3/4	1-1/16	26.99	40.9	51.2
DCTZ 12-12		3/4	19.05	3/4	1-1/16	26.99	40.4	50.7
	DCTZ 12-R12	3/4	19.05	3/4	1-1/16	26.99	42.4	52.7
DCTZ 12-16	DCTZ 12-R16	3/4	19.05	1	1-3/8	34.93	47.6	57.9
DCTZ 14-16		7/8	22.23	1	1-3/8	34.93	47.6	57.8
DCTZ 16-16	DCTZ 16-R16	1	25.4	1	1-3/8	34.93	50.0	62.6



# DSC

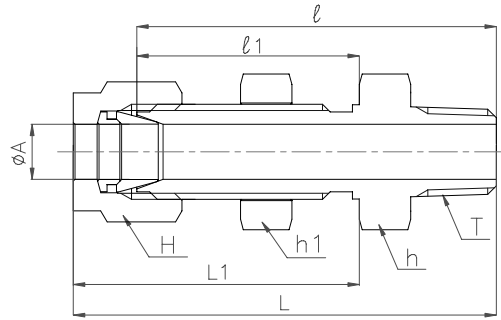
**Bulkhead Male Connector**  
Connects fractional tube to female tapered pipe thread



H : See dimensional data(Last page)

Part No.		A(Tube O.D)		T	h(HEX)	h <sub>1</sub> (HEX)	E	E <sub>1</sub>	ℓ	ℓ <sub>1</sub>	L	L <sub>1</sub>	F	Panel	
ANSI NPT	ISO/JIS R	in	mm	NPT/R	in	in	mm	mm	mm	mm	mm	mm	mm	Hole	Thick
DSC 2-2	DSC 2-R2	1/8	3.18	1/8	1/2	1/2	2.3	4.8	40.0	24.6	46.7	31.3	13.0	8.3	12.7
DSC 4-2	DSC 4-R2	1/4	6.35	1/8	5/8	5/8	4.8	4.8	42.2	26.0	49.5	33.5	15.4	11.5	10.2
DSC 4-4	DSC 4-R4	1/4	6.35	1/4	5/8	5/8	4.8	4.8	46.0	26.0	53.5	33.5	15.4	11.5	10.2
DSC 4-6	DSC 4-R6	1/4	6.35	3/8	11/16	5/8	4.8	4.8	46.7	26.0	54.2	33.5	15.4	11.5	10.2
DSC 4-8		1/4	6.35	3/8	11/16	5/8	4.8	4.8	47.7	26.0	55.2	33.5	15.4	11.5	10.2
DSC 5-2	DSC 5-R2	5/16	7.94	1/8	11/16	11/16	6.4	4.8	44.9	28.5	52.4	36.0	16.3	13.1	10.9
DSC 5-4	DSC 5-R4	5/16	7.94	1/4	11/16	11/16	6.4	6.4	48.9	28.5	56.4	36.0	16.3	13.1	10.9
DSC 5-6		5/16	7.94	3/8	11/16	11/16	6.4	6.4	49.2	28.5	56.7	36.0	16.3	13.1	10.9
DSC 6-2	DSC 6-R4	3/8	9.53	1/8	3/4	3/4	7.1	4.8	45.9	29.5	53.4	37.0	17.0	14.7	11.2
DSC 6-4		3/8	9.53	1/4	3/4	3/4	7.1	7.1	50.0	29.5	57.5	37.0	17.0	14.7	11.2
DSC 6-6		3/8	9.53	3/8	3/4	3/4	7.1	7.1	50.0	29.5	57.5	37.0	17.0	14.7	11.2
DSC 6-8	DSC 6-R8	3/8	9.53	3/8	3/4	3/4	7.1	7.1	51.0	29.5	58.5	37.0	17.0	14.7	11.2
DSC 8-4	DSC 8-R4	1/2	12.7	1/4	15/16	15/16	10.4	7.1	53.4	32.0	63.7	42.3	23.0	19.4	12.7
DSC 8-6	DSC 8-R6	1/2	12.7	3/8	15/16	15/16	10.4	10.4	53.0	32.0	63.3	42.3	23.0	19.4	12.7
DSC 8-8		1/2	12.7	3/8	15/16	15/16	10.4	10.4	54.0	32.0	64.3	42.3	23.0	19.4	12.7
DSC 8-12	DSC 8-R8	1/2	12.7	1/2	15/16	15/16	10.4	10.4	58.0	32.0	68.3	42.3	23.0	19.4	12.7
	DSC 8-R12	1/2	12.7	3/4	1-1/16	15/16	10.4	10.4	59.1	32.0	69.4	42.3	23.0	19.4	12.7
		1/2	12.7	3/4	1-1/16	15/16	10.4	10.4	61.1	32.0	71.4	42.3	23.0	19.4	12.7
DSC 10-8		5/8	15.88	1/2	1-1/16	1-1/16	12.7	12.7	59.6	32.5	69.9	42.8	24.6	22.6	12.7
DSC 12-8	DSC12-R8	3/4	19.05	1/2	1-3/16	1-3/16	15.8	12.7	65.8	37.3	76.1	47.6	24.6	25.8	16.8
DSC 12-12	DSC12-R12	3/4	19.05	3/4	1-3/16	1-3/16	15.8	15.8	65.8	37.3	76.1	47.6	24.6	25.8	16.8
		3/4	19.05	3/4	1-3/16	1-3/16	15.8	15.8	67.8	37.3	78.1	47.6	24.6	25.8	16.8
DSC 14-12		7/8	22.23	3/4	1-3/8	1-3/8	18.3	18.3	70.5	41.2	80.7	51.4	26.1	29.0	19.6
DSC 16-16		1	25.4	1	1-5/8	1-5/8	22.5	22.5	81.1	45.2	93.7	57.8	31.6	33.7	19.1

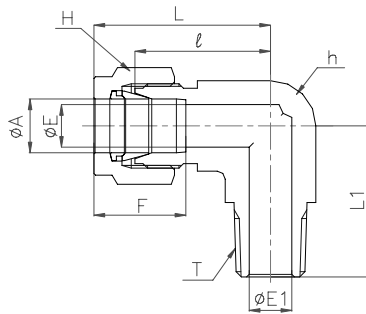
	DSCZ	Bulkhead Male Connector / Bored-through Connects fractional tube to female NPT thread
--	------	--



H : See dimensional data(Last page)

Part No.	A (Tube O. D)		T	h (HEX)		h <sub>1</sub> (HEX)		$l$	$l_1$	L	L <sub>1</sub>	Panel	
	in	mm	NPT	in	mm	in	mm	mm	mm	mm	mm	Hole	Thick
DSCZ 4-2	1/4	6.35	1/8	5/8	15.88	5/8	15.88	42.2	26.0	49.5	33.5	11.5	10.2
DSCZ 4-4	1/4	6.35	1/4	5/8	15.88	5/8	15.88	46.0	26.0	53.5	33.5	11.5	10.2
DSCZ 4-6	1/4	6.35	3/8	11/16	17.46	5/8	15.88	46.7	26.0	54.2	33.5	11.5	10.2
DSCZ 4-8	1/4	6.35	1/2	7/8	22.23	5/8	15.88	52.3	26.0	59.8	33.5	11.5	10.2
DSCZ 6-6	3/8	9.53	3/8	3/4	19.05	3/4	19.05	50.0	29.5	57.5	37.0	14.7	11.2
DSCZ 6-8	3/8	9.53	1/2	7/8	22.23	3/4	19.05	58.5	29.5	66.0	37.0	14.7	11.2
DSCZ 8-8	1/2	12.7	1/2	15/16	23.81	15/16	23.81	58.0	32.0	68.3	42.3	19.4	12.7
DSCZ 8-12	1/2	12.7	3/4	1-1/16	26.99	15/16	23.81	59.1	32.0	69.4	42.3	19.4	12.7
DSCZ 12-12	3/4	19.05	3/4	1-3/16	30.16	1-3/16	30.16	65.8	37.3	76.1	47.6	25.8	16.8
DSCZ 16-16	1	25.4	1	1-5/8	41.28	1-5/8	41.28	81.1	45.2	93.7	57.8	33.7	19.1

	DLN	Male Elbow Connects fractional tube to female tapered pipe thread
--	-----	--

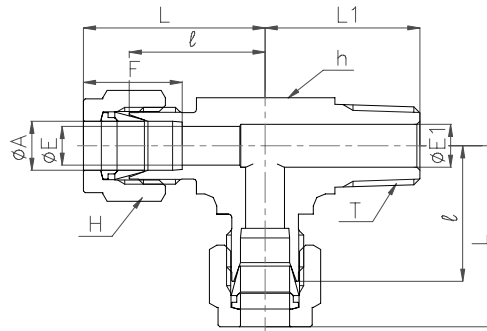


H : See dimensional data(Last page)

Part No.		A(Tube O. D)		T	E	E <sub>1</sub>	h(Flat)		ℓ	L	L <sub>1</sub>	F
ANSI NPT	ISO/JIS R	in	mm	NPT/R	mm	mm	in	mm	mm	mm	mm	mm
DLN 1-1		1/16	1.59	1/16	1.3	3.0	7/16	11.1	14.2	18.2	18.5	8.9
DLN 1-2	DLN 1-R2	1/16	1.59	1/8	1.3	4.8	7/16	11.1	14.2	18.2	18.5	8.9
DLN 2-1		1/8	3.18	1/16	2.3	3.0	7/16	11.1	16.8	23.5	18.5	13.0
DLN 2-2	DLN 2-R2	1/8	3.18	1/8	2.3	4.8	7/16	11.1	16.8	23.5	18.5	13.0
DLN 2-4	DLN 2-R4	1/8	3.18	1/4	2.3	4.8	1/2	12.7	18.3	25.0	24.0	13.0
DLN 2-6		1/8	3.18	3/8	2.3	9.4	11/16	17.5	22.5	29.2	28.5	13.0
DLN 2-8		1/8	3.18	1/2	2.3	7.1	13/16	20.6	22.5	28.7	33.5	13.0
DLN 3-2	DLN 3-R2	3/16	4.76	1/8	3.0	4.8	1/2	12.7	19.0	25.7	19.0	13.8
DLN 3-4		3/16	4.76	1/4	3.0	6.0	1/2	12.7	19.0	25.7	24.0	13.8
DLN 4-1		1/4	6.35	1/16	4.8	3.0	1/2	12.7	20.0	27.5	19.0	15.4
DLN 4-2	DLN 4-R2	1/4	6.35	1/8	4.8	4.8	1/2	12.7	20.0	27.5	19.0	15.4
DLN 4-4	DLN 4-R4	1/4	6.35	1/4	4.8	6.0	1/2	12.7	20.0	27.5	24.0	15.4
DLN 4-6	DLN 4-R6	1/4	6.35	3/8	4.8	9.4	11/16	17.5	22.5	30.0	28.5	15.4
DLN 4-8	DLN 4-R8	1/4	6.35	1/2	4.8	10.4	13/16	20.6	24.5	32.0	33.5	15.4
DLN 4-12		1/4	6.35	3/4	4.8	12.7	1-1/16	27.0	28.2	35.7	35.5	15.4
DLN 5-2	DLN 5-R2	5/16	7.94	1/8	6.4	4.8	5/8	15.9	22.4	29.9	20.5	16.3
DLN 5-4	DLN 5-R4	5/16	7.94	1/4	6.4	7.1	5/8	15.9	22.4	29.9	25.5	16.3
DLN 5-6	DLN 5-R6	5/16	7.94	3/8	6.4	10.4	11/16	17.5	24.0	31.5	28.5	16.3
	DLN 5-R8	5/16	7.94	1/2	6.4	12.7	13/16	20.6	25.4	32.9	32.0	16.3
DLN 6-2	DLN 6-R2	3/8	9.53	1/8	7.1	4.8	5/8	15.9	23.0	30.5	20.5	17.0
DLN 6-4	DLN 6-R4	3/8	9.53	1/4	7.1	6.0	5/8	15.9	23.0	30.5	25.5	17.0
DLN 6-6	DLN 6-R6	3/8	9.53	3/8	7.1	10.4	11/16	17.5	24.0	31.5	28.5	17.0
DLN 6-8	DLN 6-R8	3/8	9.53	1/2	7.1	12.7	13/16	20.6	26.2	33.7	32.0	17.0
DLN 6-12		3/8	9.53	3/4	7.1	18.3	1-1/16	27.0	28.2	35.7	35.5	17.0
	DLN 6-R12	3/8	9.53	3/4	7.1	18.3	1-1/16	27.0	28.2	35.7	37.5	17.0
DLN 8-2	DLN 8-R2	1/2	12.7	1/8	10.4	4.8	13/16	20.6	25.0	35.3	23.5	23.0
DLN 8-4	DLN 8-R4	1/2	12.7	1/4	10.4	7.1	13/16	20.6	25.0	35.3	27.5	23.0
DLN 8-6	DLN 8-R6	1/2	12.7	3/8	10.4	10.4	13/16	20.6	25.0	35.3	27.5	23.0
DLN 8-8	DLN 8-R8	1/2	12.7	1/2	10.4	12.7	13/16	20.6	26.2	36.5	33.5	23.0
DLN 8-12		1/2	12.7	3/4	10.4	18.3	1-1/16	27.0	28.2	38.5	35.5	23.0
	DLN 8-R12	1/2	12.7	3/4	10.4	18.3	1-1/16	27.0	28.2	38.5	37.5	23.0
DLN 8-16	DLN 8-R16	1/2	12.7	1	10.4	22.5	1-5/16	33.3	31.8	42.1	46.7	23.0
DLN 10-4		5/8	15.88	1/4	12.7	7.1	15/16	23.8	27.0	37.3	29.5	24.6
DLN 10-6	DLN 10-R6	5/8	15.88	3/8	12.7	10.4	15/16	23.8	27.0	37.3	29.5	24.6
DLN 10-8	DLN 10-R8	5/8	15.88	1/2	12.7	12.7	15/16	23.8	27.0	37.3	34.0	24.6
DLN 10-12	DLN 10-R12	5/8	15.88	3/4	12.7	18.3	1-1/16	27.0	28.2	38.5	37.5	24.6
DLN 12-4	DLN 12-R4	3/4	19.05	1/4	15.8	7.1	1-1/16	27.0	28.2	38.5	30.5	24.6
DLN 12-6		3/4	19.05	3/8	15.8	10.4	1-1/16	27.0	28.2	38.5	30.5	24.6
DLN 12-8	DLN 12-R8	3/4	19.05	1/2	15.8	12.7	1-1/16	27.0	28.2	38.5	35.5	24.6
DLN 12-12		3/4	19.05	3/4	15.8	18.3	1-1/16	27.0	28.2	38.5	35.5	24.6
	DLN 12-R12	3/4	19.05	3/4	15.8	18.3	1-1/16	27.0	28.2	38.5	37.5	24.6
DLN 12-16	DLN 12-R16	3/4	19.05	1	15.8	22.5	1-5/16	33.3	31.8	42.1	46.7	24.6
DLN 14-12		7/8	22.23	3/4	18.3	18.3	1-1/4	31.8	32.5	42.7	42.0	26.1
	DLN 14-R12	7/8	22.23	3/4	18.3	18.3	1-1/4	31.8	32.5	42.7	44.0	26.1
DLN 16-8	DLN 16-R8	1	25.4	1/2	22.5	12.7	1-5/16	33.3	33.3	45.9	42.0	31.6
DLN 16-12		1	25.4	3/4	22.5	18.3	1-5/16	33.3	33.3	45.9	42.0	31.6
	DLN 16-R12	1	25.4	3/4	22.5	18.3	1-5/16	33.3	33.3	45.9	44.0	31.6
DLN 16-16	DLN 16-R16	1	25.4	1	22.5	22.5	1-5/16	33.3	33.3	45.9	46.7	31.6

# DTK

## Male Run Tee Fractional tube to female tapered pipe thread

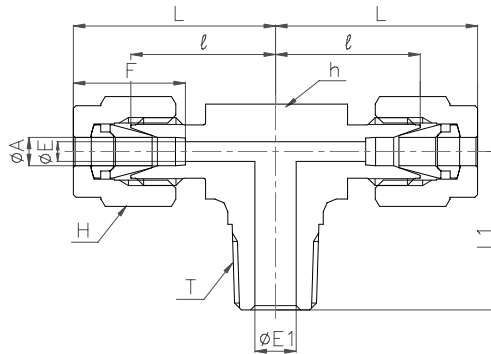


H : See dimensional data (Last page)

Part No.		A (Tube O. D)		T	E	E <sub>1</sub>	h (Flat)		l	L	L <sub>1</sub>	F
ANSI NPT	ISO/JIS R	in	mm	NPT/R	mm	mm	in	mm	mm	mm	mm	mm
DTK 1-2		1/16	1.59	1/8	1.3	4.8	7/16	11.1	14.2	18.2	18.5	8.9
DTK 2-2	DTK 2-R2	1/8	3.18	1/8	2.3	4.8	7/16	11.1	16.8	23.5	18.5	13.0
DTK 2-4	DTK 2-R4	1/8	3.18	1/4	2.3	4.8	1/2	12.7	18.3	25.0	24.0	13.0
DTK 3-2	DTK 3-R2	3/16	4.76	1/8	3.0	4.8	1/2	12.7	19.0	25.7	19.0	13.8
DTK 4-2	DTK 4-R2	1/4	6.35	1/8	4.8	4.8	1/2	12.7	20.0	27.5	19.0	15.4
DTK 4-4	DTK 4-R4	1/4	6.35	1/4	4.8	6.0	1/2	12.7	20.0	27.5	24.0	15.4
DTK 4-6	DTK 4-R6	1/4	6.35	3/8	4.8	9.4	11/16	17.5	22.5	30.0	28.5	15.4
DTK 5-2	DTK 5-R2	5/16	7.94	1/8	6.4	4.8	5/8	15.9	22.4	29.9	20.5	16.3
DTK 5-4	DTK 5-R4	5/16	7.94	1/4	6.4	7.1	5/8	15.9	22.4	29.9	25.5	16.3
	DTK 5-R6	5/16	7.94	3/8	6.4	10.4	11/16	17.5	24.0	31.5	28.5	16.3
DTK 6-2	DTK 6-R2	3/8	9.53	1/8	7.1	4.8	5/8	15.9	23.0	30.5	20.5	17.0
DTK 6-4		3/8	9.53	1/4	7.1	7.1	5/8	15.9	23.0	30.5	25.5	17.0
DTK 6-6	DTK 6-R4	3/8	9.53	1/4	7.1	6.0	5/8	15.9	23.0	30.5	25.5	17.0
	DTK 6-R6	3/8	9.53	3/8	7.1	9.4	11/16	17.5	24.0	31.5	28.5	17.0
DTK 8-4	DTK 8-R4	1/2	12.7	1/4	10.4	7.1	13/16	20.6	25.0	35.3	27.5	23.0
DTK 8-6	DTK 8-R6	1/2	12.7	3/8	10.4	10.4	13/16	20.6	25.0	35.3	27.5	23.0
DTK 8-8	DTK 8-R8	1/2	12.7	1/2	10.4	12.7	13/16	20.6	26.2	36.5	33.5	23.0
DTK 10-8	DTK 10-R8	5/8	15.88	1/2	12.7	12.7	15/16	23.8	27.0	37.3	34.0	24.6
DTK 12-8 DTK 12-12	DTK 12-R4	3/4	19.05	1/4	15.8	7.1	1-1/16	27.0	28.2	38.5	30.5	24.6
	DTK 12-R8	3/4	19.05	1/2	15.8	12.7	1-1/16	27.0	28.2	38.5	35.5	24.6
	DTK 12-R12	3/4	19.05	3/4	15.8	18.3	1-1/16	27.0	28.2	38.5	35.5	24.6
DTK 14-12	DTK 14-R8	7/8	22.23	1/2	18.3	12.7	1-1/4	31.8	32.5	42.7	42.0	26.1
		7/8	22.23	3/4	18.3	18.3	1-1/4	31.8	32.5	42.7	42.0	26.1
DTK 16-16		1	25.4	1	22.5	22.5	1-5/16	33.3	33.3	45.9	46.7	31.6

# DTN

## Male Branch Tee Fractional tube to female tapered pipe thread

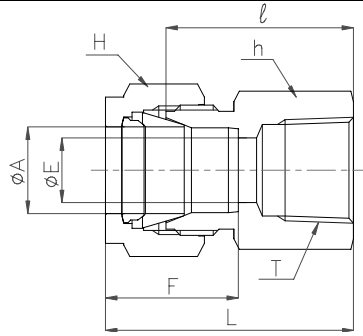


H : See dimensional data(Last page)

Part No.		A (Tube O. D)		T	E	E <sub>1</sub>	h (Flat)		l	L	L <sub>1</sub>	F
ANSI NPT	ISO/JIS R	in	mm	NPT/R	mm	mm	in	mm	mm	mm	mm	mm
DTN 2-2	DTN 2-R2	1/8	3.18	1/8	2.3	4.8	7/16	11.1	16.8	23.5	18.5	13.0
DTN 2-4	DTN 2-R4	1/8	3.18	1/4	2.3	4.8	1/2	12.7	18.3	25.0	24.0	13.0
DTN 3-2	DTN 3-R2	3/16	4.76	1/8	3.0	4.8	1/2	12.7	19.0	25.7	19.0	13.8
DTN 4-2	DTN 4-R2	1/4	6.35	1/8	4.8	4.8	1/2	12.7	20.0	27.5	19.0	15.4
DTN 4-4	DTN 4-R4	1/4	6.35	1/4	4.8	6.0	1/2	12.7	20.0	27.5	24.0	15.4
DTN 4-6	DTN 4-R6	1/4	6.35	3/8	4.8	9.4	11/16	17.5	22.5	30.0	28.5	15.4
DTN 4-8		1/4	6.35	1/2	4.8	10.4	13/16	20.6	24.5	32.0	33.5	15.4
DTN 5-2	DTN 5-R2	5/16	7.94	1/8	6.4	4.8	5/8	15.9	22.4	29.9	20.5	16.3
DTN 5-4	DTN 5-R4	5/16	7.94	1/4	6.4	7.1	5/8	15.9	22.4	29.9	25.5	16.3
	DTN 5-R6	5/16	7.94	3/8	6.4	10.4	11/16	17.5	24.0	31.5	28.5	16.3
DTN 6-2	DTN 6-R2	3/8	9.53	1/8	7.1	4.8	5/8	15.9	23.0	30.5	20.5	17.0
DTN 6-4		3/8	9.53	1/4	7.1	7.1	5/8	15.9	23.0	30.5	25.5	17.0
	DTN 6-R4	3/8	9.53	1/4	7.1	6.0	5/8	15.9	23.0	30.5	25.5	17.0
DTN 6-6	DTN 6-R6	3/8	9.53	3/8	7.1	9.4	11/16	17.5	24.0	31.5	28.5	17.0
DTN 6-8	DTN 6-R8	3/8	9.53	1/2	7.1	12.7	13/16	20.6	26.2	33.7	32.0	17.0
DTN 8-4	DTN 8-R4	1/2	12.7	1/4	10.4	7.1	13/16	20.6	25.0	35.3	27.5	23.0
DTN 8-6	DTN 8-R6	1/2	12.7	3/8	10.4	10.4	13/16	20.6	25.0	35.3	27.5	23.0
DTN 8-8	DTN 8-R8	1/2	12.7	1/2	10.4	12.7	13/16	20.6	26.2	36.5	33.5	23.0
DTN 8-12		1/2	12.7	3/4	10.4	18.3	1-1/16	27.0	28.2	38.5	35.5	23.0
DTN 10-8	DTN 10-R8	5/8	15.88	1/2	12.7	12.7	15/16	23.8	27.0	37.3	34.0	24.6
	DTN 12-R4	3/4	19.05	1/4	15.8	7.1	1-1/16	27.0	28.2	38.5	30.5	24.6
	DTN 12-R6	3/4	19.05	3/8	15.8	10.4	1-1/16	27.0	28.2	38.5	32.0	24.6
DTN 12-8	DTN 12-R8	3/4	19.05	1/2	15.8	12.7	1-1/16	27.0	28.2	38.5	35.5	24.6
DTN 12-12		3/4	19.05	3/4	15.8	18.3	1-1/16	27.0	28.2	38.5	35.5	24.6
	DTN 12-R12	3/4	19.05	3/4	15.8	18.3	1-1/16	27.0	28.2	38.5	37.5	24.6
	DTN 12-R16	3/4	19.05	1	15.8	22.5	1-5/16	33.3	31.8	42.1	46.7	24.6
DTN 14-12		7/8	22.23	3/4	18.3	18.3	1-1/4	31.8	32.5	42.7	42.0	26.1
DTN 16-16	DTN 16-R16	1	25.4	1	22.5	22.5	1-5/16	33.3	33.3	45.9	46.7	31.6

# DSA

Female Connector  
Connects fractional tube to male tapered pipe thread

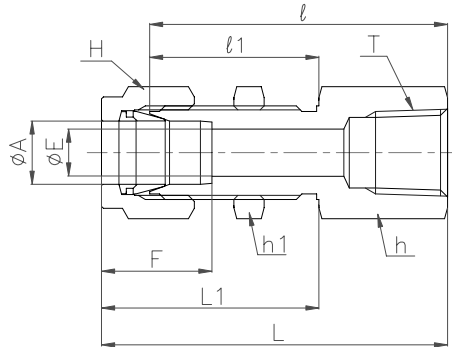


H : See dimensional data (Last page)

Part No.		A (Tube O. D.)		T	E	h (HEX)		ℓ	L	F
ANSI NPT	ISO/JIS Rc	in	mm	NPT/Rc	mm	in	mm	mm	mm	mm
DSA 1-2		1/16	1.59	1/8	1.3	9/16	14.29	20.8	24.8	8.9
DSA 1-4		1/16	1.59	1/4	1.3	3/4	19.05	27.0	31.0	8.9
DSA 2-2	DSA 2-R2	1/8	3.18	1/8	2.3	9/16	14.29	22.5	29.2	13.0
DSA 2-4	DSA 2-R4	1/8	3.18	1/4	2.3	3/4	19.05	27.0	33.7	13.0
	DSA 2-R6	1/8	3.18	3/8	2.3	7/8	22.23	29.7	36.4	13.0
DSA 2-8		1/8	3.18	1/2	2.3	1-1/16	26.99	34.0	40.7	13.0
DSA 3-2	DSA 3-R2	3/16	4.76	1/8	3.0	9/16	14.29	23.0	29.7	13.8
	DSA 3-R4	3/16	4.76	1/4	3.0	3/4	19.05	28.0	34.7	13.8
DSA 4-1		1/4	6.35	1/16	4.8	1/2	12.7	24.0	31.5	15.4
DSA 4-2	DSA 4-R2	1/4	6.35	1/8	4.8	9/16	14.29	24.0	31.5	15.4
DSA 4-4	DSA 4-R4	1/4	6.35	1/4	4.8	3/4	19.05	28.5	36.0	15.4
DSA 4-6		1/4	6.35	3/8	4.8	7/8	22.23	30.3	37.8	15.4
	DSA 4-R6	1/4	6.35	3/8	4.8	7/8	22.23	31.3	38.8	15.4
DSA 4-8	DSA 4-R8	1/4	6.35	1/2	4.8	1-1/16	26.99	35.8	43.3	15.4
DSA 4-12		1/4	6.35	3/4	4.8	1-5/16	33.34	37.8	45.3	15.4
DSA 5-2	DSA 5-R2	5/16	7.94	1/8	6.4	9/16	14.29	24.7	32.2	16.3
DSA 5-4	DSA 5-R4	5/16	7.94	1/4	6.4	3/4	19.05	29.5	37.0	16.3
	DSA 5-R6	5/16	7.94	3/8	6.4	7/8	22.23	32.1	39.6	16.3
DSA 5-8	DSA 5-R8	5/16	7.94	1/2	6.4	1-1/16	26.99	36.6	44.1	16.3
DSA 6-2	DSA 6-R2	3/8	9.53	1/8	7.1	5/8	15.88	25.4	32.9	17.0
DSA 6-4	DSA 6-R4	3/8	9.53	1/4	7.1	3/4	19.05	30.2	37.7	17.0
DSA 6-6		3/8	9.53	3/8	7.1	7/8	22.23	31.9	39.4	17.0
	DSA 6-R6	3/8	9.53	3/8	7.1	7/8	22.23	32.9	40.4	17.0
DSA 6-8	DSA 6-R8	3/8	9.53	1/2	7.1	1-1/16	26.99	36.5	44.0	17.0
	DSA 6-R12	3/8	9.53	3/4	7.1	1-5/16	33.34	40.3	47.8	17.0
DSA 6-16		3/8	9.53	1	7.1	1-5/8	41.28	47.6	55.1	17.0
DSA 8-2	DSA 8-R2	1/2	12.7	1/8	10.4	13/16	20.64	25.4	35.7	23.0
DSA 8-4	DSA 8-R4	1/2	12.7	1/4	10.4	13/16	20.64	31.9	42.2	23.0
DSA 8-6		1/2	12.7	3/8	10.4	7/8	22.23	31.9	42.2	23.0
	DSA 8-R6	1/2	12.7	3/8	10.4	7/8	22.23	32.9	43.2	23.0
DSA 8-8	DSA 8-R8	1/2	12.7	1/2	10.4	1-1/16	26.99	36.6	46.9	23.0
DSA 8-12		1/2	12.7	3/4	10.4	1-5/16	33.34	38.1	48.4	23.0
	DSA 8-R12	1/2	12.7	3/4	10.4	1-5/16	33.34	39.1	49.4	23.0
	DSA 8-R16	1/2	12.7	1	10.4	1-5/8	41.28	47.6	57.9	23.0
DSA 10-6	DSA 10-R6	5/8	15.88	3/8	12.7	15/16	23.81	32.0	42.3	24.6
DSA 10-8	DSA 10-R8	5/8	15.88	1/2	12.7	1-1/16	26.99	36.6	46.9	24.6
DSA 10-12		5/8	15.88	3/4	12.7	1-5/16	33.34	38.1	48.4	24.6
DSA 12-6	DSA 12-R4	3/4	19.05	1/4	15.8	1-1/16	26.99	31.8	42.1	24.6
		3/4	19.05	3/8	15.8	1-1/16	26.99	34.0	44.3	24.6
DSA 12-8	DSA 12-R8	3/4	19.05	1/2	15.8	1-1/16	26.99	36.6	46.9	24.6
DSA 12-12		3/4	19.05	3/4	15.8	1-5/16	33.34	38.1	48.4	24.6
	DSA 12-R12	3/4	19.05	3/4	15.8	1-5/16	33.34	40.1	50.4	24.6
DSA 12-16		3/4	19.05	1	15.8	1-5/8	41.28	47.6	57.9	24.6

Part No.		A (Tube O. D)		T	E	h (HEX)		ℓ	L	F
ANSI NPT	ISO/JIS R <sub>c</sub>	in	mm	NPT/R <sub>c</sub>	mm	in	mm	mm	mm	mm
DSA 14-12	DSA 14-R12	7/8	22.23	3/4	18.3	1-5/16	33.34	40.0	50.2	26.1
		7/8	22.23	3/4	18.3	1-5/16	33.34	41.0	51.2	26.1
DSA 16-8	DSA 16-R12 DSA 16-R16	1	25.4	1/2	22.5	1-3/8	34.93	41.1	53.7	31.6
DSA 16-12		1	25.4	3/4	22.5	1-3/8	34.93	41.1	53.7	31.6
		1	25.4	3/4	22.5	1-3/8	34.93	42.1	54.7	31.6
DSA 16-16		1	25.4	1	22.5	1-5/8	41.28	50.0	62.6	31.6

<b>DSS</b>	<b>Bulkhead Female Connector</b> Connects fractional tube to male NPT thread
------------	---



H : See dimensional data (Last page)

Part No.	A (Tube O. D)		T	E	h (HEX)		h <sub>1</sub> (HEX)		ℓ	ℓ <sub>1</sub>	L	L <sub>1</sub>	F	Panel	
	in	mm	NPT	mm	in	mm	in	mm	mm	mm	mm	mm	mm	Hole	Thick
DSS 2-2	1/8	3.18	1/8	2.3	9/16	14.29	1/2	12.7	38.0	24.6	44.7	31.3	13.0	8.3	12.7
DSS 4-2	1/4	6.35	1/8	4.8	5/8	15.88	5/8	15.88	39.5	26.0	47.0	33.5	15.4	11.5	10.2
DSS 4-4	1/4	6.35	1/4	4.8	3/4	19.05	5/8	15.88	44.5	26.0	52.0	33.5	15.4	11.5	10.2
DSS 5-4	5/16	7.94	1/4	6.4	3/4	19.05	11/16	17.46	46.9	28.5	54.4	36.0	16.3	13.1	10.9
DSS 6-4	3/8	9.53	1/4	7.1	3/4	19.05	3/4	19.05	48.0	29.5	55.5	37.0	17.0	14.7	11.2
DSS 6-6	3/8	9.53	3/8	7.1	7/8	22.23	3/4	19.05	49.0	29.5	56.5	37.0	17.0	14.7	11.2
DSS 6-8	3/8	9.53	1/2	7.1	1-1/16	26.99	3/4	19.05	54.1	29.5	61.6	37.0	17.0	14.7	11.2
DSS 8-6	1/2	12.7	3/8	10.4	15/16	23.81	15/16	23.81	51.5	32.0	61.8	42.3	23.0	19.4	12.7
DSS 8-8	1/2	12.7	1/2	10.4	1-1/16	26.99	15/16	23.81	56.5	32.0	66.8	42.3	23.0	19.4	12.7
DSS12-8	3/4	19.05	1/2	15.8	1-1/16	26.99	1-3/16	30.16	62.0	37.3	72.3	47.6	24.6	25.8	16.8

<b>DSS</b>	<b>Bulkhead Female Connector</b> Connects fractional tube to male ISO tapered pipe thread
------------	--

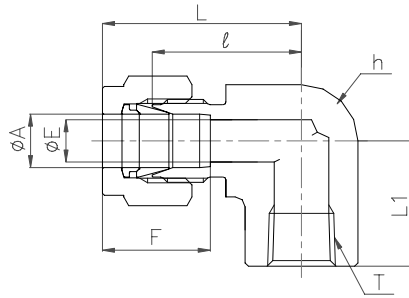
H : See dimensional data (Last page)

Part No.	A (Tube O. D)		T	E	h (HEX)		h <sub>1</sub> (HEX)		ℓ	ℓ <sub>1</sub>	L	L <sub>1</sub>	F	Panel	
	in	mm	R <sub>c</sub>	mm	in	mm	in	mm	mm	mm	mm	mm	mm	Hole	Thick
DSS 2-R2	1/8	3.18	1/8	2.3	9/16	14.29	1/2	12.7	38.0	24.6	44.7	31.3	13.0	8.3	12.7
DSS 4-R2	1/4	6.35	1/8	4.8	5/8	15.88	5/8	15.88	39.5	26.0	47.0	33.5	15.4	11.5	10.2
DSS 4-R4	1/4	6.35	1/4	4.8	3/4	19.05	5/8	15.88	44.5	26.0	52.0	33.5	15.4	11.5	10.2
DSS 4-R6	1/4	6.35	3/8	4.8	7/8	22.23	5/8	15.88	47.0	26.0	54.5	33.5	15.4	11.5	10.2
DSS 5-R4	5/16	7.94	1/4	6.4	3/4	19.05	11/16	17.46	46.9	28.5	54.4	36.0	16.3	13.1	10.9
DSS 6-R4	3/8	9.53	1/4	7.1	3/4	19.05	3/4	19.05	48.0	29.5	55.5	37.0	17.0	14.7	11.2
DSS 6-R6	3/8	9.53	3/8	7.1	7/8	22.23	3/4	19.05	50.0	29.5	57.5	37.0	17.0	14.7	11.2
DSS 6-R8	3/8	9.53	1/2	7.1	1-1/16	26.99	3/4	19.05	54.1	29.5	61.6	37.0	17.0	14.7	11.2
DSS 8-R4	1/2	12.7	1/4	10.4	13/16	20.64	15/16	23.81	51.5	32.0	61.8	42.3	23.0	19.4	12.7
DSS 8-R6	1/2	12.7	3/8	10.4	15/16	23.81	15/16	23.81	52.5	32.0	62.8	42.3	23.0	19.4	12.7
DSS 8-R8	1/2	12.7	1/2	10.4	1-1/16	26.99	15/16	23.81	56.5	32.0	66.8	42.3	23.0	19.4	12.7
DSS10-R8	5/8	15.88	1/2	12.7	1-1/16	26.99	1-1/16	26.99	57.1	32.5	67.4	42.8	24.6	22.6	12.7

# D L F

## Female Elbow

Connects fractional tube to male tapered pipe thread



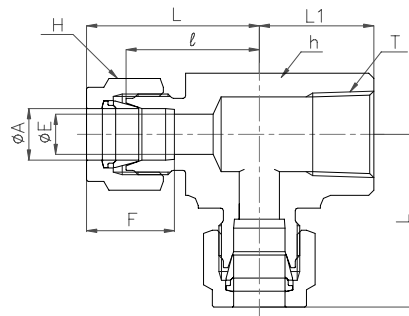
H : See dimensional data(Last page)

Part No.		A(Tube O. D)		T	E	h(Flat)		ℓ	L	L <sub>1</sub>	F
ANSI NPT	ISO/JIS Rc	in	mm	NPT/Rc	mm	in	mm	mm	mm	mm	mm
DLF 2-2	DLF 2-R2	1/8	3.18	1/8	2.3	5/8	15.9	17.5	24.2	19.0	13.0
DLF 2-4	DLF 2-R4	1/8	3.18	1/4	2.3	13/16	20.6	20.5	27.2	22.5	13.0
DLF 3-2	DLF 3-R2	3/16	4.76	1/8	3.0	5/8	15.9	18.3	25.0	19.0	13.8
DLF 4-2	DLF 4-R2	1/4	6.35	1/8	4.8	5/8	15.9	19.0	26.5	19.0	15.4
DLF 4-4	DLF 4-R4	1/4	6.35	1/4	4.8	13/16	20.6	22.5	30.0	22.5	15.4
DLF 4-6	DLF 4-R6	1/4	6.35	3/8	4.8	15/16	23.8	24.7	32.2	22.5	15.4
DLF 4-8	DLF 4-R8	1/4	6.35	1/2	4.8	1-1/16	27.0	28.2	35.7	28.5	15.4
DLF 5-2	DLF 5-R2	5/16	7.94	1/8	6.4	5/8	15.9	22.5	29.9	19.0	16.3
DLF 5-4	DLF 5-R4	5/16	7.94	1/4	6.4	13/16	20.6	23.1	30.6	22.5	16.3
	DLF 5-R6	5/16	7.94	3/8	6.4	15/16	23.8	26.2	33.7	22.5	16.3
DLF 6-2	DLF 6-R2	3/8	9.53	1/8	7.1	5/8	15.9	23.0	30.5	19.0	17.0
DLF 6-4	DLF 6-R4	3/8	9.53	1/4	7.1	13/16	20.6	24.0	31.5	22.5	17.0
DLF 6-6	DLF 6-R6	3/8	9.53	3/8	7.1	15/16	23.8	26.2	33.7	22.5	17.0
DLF 6-8	DLF 6-R8	3/8	9.53	1/2	7.1	1-1/16	27.0	28.2	36.0	28.5	17.0
DLF 8-4	DLF 8-R2	1/2	12.7	1/8	10.4	13/16	20.6	25.0	35.3	22.5	23.0
	DLF 8-R4	1/2	12.7	1/4	10.4	13/16	20.6	25.0	35.3	22.5	23.0
DLF 8-6	DLF 8-R6	1/2	12.7	3/8	10.4	15/16	23.8	26.2	36.5	22.5	23.0
DLF 8-8	DLF 8-R8	1/2	12.7	1/2	10.4	1-1/16	27.0	28.2	38.5	28.5	23.0
DLF 8-12		1/2	12.7	3/4	10.4	1-5/16	33.3	31.8	42.3	31.8	23.0
DLF 10-6	DLF 10-R6	5/8	15.88	3/8	12.7	15/16	23.8	27.0	37.2	22.5	24.6
DLF 10-8	DLF 10-R8	5/8	15.88	1/2	12.7	1-1/16	27.0	28.2	38.5	28.5	24.6
DLF 12-8	DLF 12-R6	3/4	19.05	3/8	15.8	1-1/16	27.0	28.2	38.5	28.5	24.6
	DLF 12-R8	3/4	19.05	1/2	15.8	1-1/16	27.0	28.2	38.5	28.5	24.6
DLF 12-12	DLF 12-R12	3/4	19.05	3/4	15.8	1-5/16	33.3	31.8	42.1	31.8	24.6
DLF 14-12	DLF 14-R12	7/8	22.23	3/4	18.3	1-5/16	33.3	32.5	42.7	31.8	26.1
DLF 16-6		1	25.4	3/8	22.5	1-5/16	33.3	33.3	45.9	28.5	31.6
DLF 16-12	DLF 16-R12	1	25.4	3/4	22.5	1-5/16	33.3	33.3	45.9	33.3	31.6
DLF 16-16	DLF 16-R16	1	25.4	1	22.5	1-13/16	46.0	40.0	52.6	38.1	31.6



# DTF

**Female Run Tee**  
Connects fractional tube to male tapered pipe thread

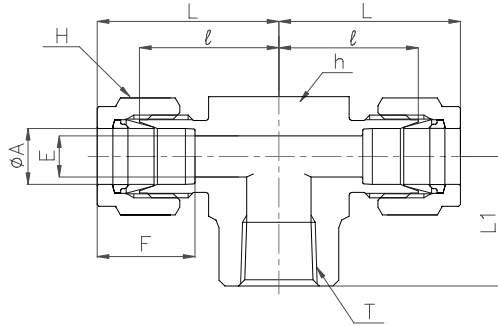


H : See dimensional data (Last page)

Part No.		A (Tube O. D)		T	E	h (Flat)		ℓ	L	L <sub>1</sub>	F
ANSI NPT	ISO/JIS Rc	in	mm	NPT/Rc	mm	in	mm	mm	mm	mm	mm
	DTF 1-R2	1/16	1.59	1/8	1.3	5/8	15.9	17.5	21.5	19.0	8.9
DTF 2-2	DTF 2-R2	1/8	3.18	1/8	2.3	5/8	15.9	17.5	24.2	19.0	13.0
DTF 4-2	DTF 4-R2	1/4	6.35	1/8	4.8	5/8	15.9	19.0	26.5	19.0	15.4
DTF 4-4	DTF 4-R4	1/4	6.35	1/4	4.8	13/16	20.6	22.5	30.0	22.5	15.4
DTF 5-2		5/16	7.94	1/8	6.4	5/8	15.9	22.5	29.9	19.0	16.3
DTF 5-4	DTF 5-R4	5/16	7.94	1/4	6.4	13/16	20.6	23.1	30.6	22.5	16.3
	DTF 6-R2	3/8	9.53	1/8	7.1	5/8	15.9	23.0	30.5	19.0	17.0
DTF 6-4	DTF 6-R4	3/8	9.53	1/4	7.1	13/16	20.6	24.0	31.5	22.5	17.0
DTF 6-6	DTF 6-R6	3/8	9.53	3/8	7.1	15/16	23.8	26.2	33.7	22.5	17.0
	DTF 8-R2	1/2	12.7	1/8	10.4	13/16	20.6	25.0	35.3	22.5	23.0
	DTF 8-R4	1/2	12.7	1/4	10.4	13/16	20.6	25.0	35.3	22.5	23.0
DTF 8-6	DTF 8-R6	1/2	12.7	3/8	10.4	15/16	23.8	26.2	36.5	22.5	23.0
DTF 8-8	DTF 8-R8	1/2	12.7	1/2	10.4	1-1/16	27.0	28.2	38.8	28.5	23.0
	DTF10-R2	5/8	15.88	1/8	12.7	15/16	23.8	27.0	37.3	22.5	24.6
DTF10-8	DTF10-R8	5/8	15.88	1/2	12.7	1-1/16	27.0	28.2	38.8	28.5	24.6
	DTF12-R4	3/4	19.05	1/4	15.8	1-1/16	27.0	28.2	38.6	28.5	24.6
	DTF12-R8	3/4	19.05	1/2	15.8	1-1/16	27.0	28.2	38.6	28.5	24.6
DTF12-12	DTF12-R12	3/4	19.05	3/4	15.8	1-5/16	33.3	31.8	42.1	31.8	24.6
	DTF14-R8	7/8	22.23	1/2	18.3	1-1/4	31.8	32.5	42.7	32.5	26.1
	DTF16-R2	1	25.4	1/8	22.5	1-5/16	33.3	33.3	45.9	28.5	31.6
	DTF16-R4	1	25.4	1/4	22.5	1-5/16	33.3	33.3	45.9	28.5	31.6
	DTF16-R8	1	25.4	1/2	22.5	1-5/16	33.3	33.3	45.9	33.3	31.6
	DTF16-R16	1	25.4	1	22.5	1-7/8	47.6	38.6	51.2	38.1	31.6

# DTH

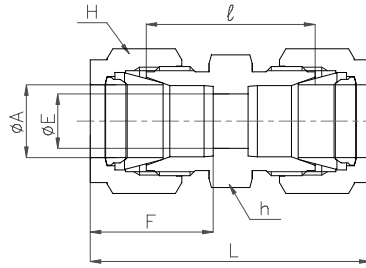
**Female Branch Tee**  
Connects fractional tube to male tapered pipe thread



H : See dimensional data (Last page)

Part No.		A (Tube O. D)		T	E	h (Flat)		l	L	L <sub>1</sub>	F
ANSI NPT	ISO/JIS Rc	in	mm	NPT/Rc	mm	in	mm	mm	mm	mm	mm
DTH 2-2	DTH 2-R2	1/8	3.18	1/8	2.3	5/8	15.9	17.5	24.2	19.0	13.0
DTH 2-4	DTH 2-R4	1/8	3.18	1/4	2.3	13/16	20.6	20.5	27.2	22.5	13.0
	DTH 2-R6	1/8	3.18	3/8	2.3	13/16	20.6	26.2	32.9	22.5	13.0
DTH 4-2	DTH 4-R2	1/4	6.35	1/8	4.8	5/8	15.9	19.0	26.5	19.0	15.4
DTH 4-4	DTH 4-R4	1/4	6.35	1/4	4.8	13/16	20.6	22.5	30.0	22.5	15.4
	DTH 4-R6	1/4	6.35	3/8	4.8	15/16	23.8	24.7	32.2	22.5	15.4
	DTH 4-R8	1/4	6.35	1/2	4.8	1-1/16	27.0	28.2	35.7	28.5	15.4
	DTH 5-R4	5/16	7.94	1/4	6.4	13/16	20.6	23.1	30.6	22.5	16.3
DTH 6-2	DTH 6-R2	3/8	9.53	1/8	7.1	5/8	15.9	23.0	30.5	19.0	17.0
DTH 6-4	DTH 6-R4	3/8	9.53	1/4	7.1	13/16	20.6	24.0	31.5	22.5	17.0
DTH 6-6	DTH 6-R6	3/8	9.53	3/8	7.1	15/16	23.8	26.2	33.7	22.5	17.0
	DTH 6-R8	3/8	9.53	1/2	7.1	1-1/16	27.0	28.2	36.0	28.5	17.0
	DTH 8-R2	1/2	12.7	1/8	10.4	13/16	20.6	25.0	35.3	22.5	23.0
DTH 8-4	DTH 8-R4	1/2	12.7	1/4	10.4	13/16	20.6	25.0	35.3	22.5	23.0
DTH 8-6	DTH 8-R6	1/2	12.7	3/8	10.4	15/16	23.8	26.2	36.5	22.5	23.0
DTH 8-8	DTH 8-R8	1/2	12.7	1/2	10.4	1-1/16	27.0	28.2	38.8	28.5	23.0
	DTH 8-R12	1/2	12.7	3/4	10.4	1-5/16	33.3	31.8	42.1	31.8	23.0
	DTH10-R2	5/8	15.88	1/8	12.7	15/16	23.8	27.0	37.3	22.5	24.6
DTH10-6	DTH10-R6	5/8	15.88	3/8	12.7	15/16	23.8	27.0	37.3	22.5	24.6
DTH10-8	DTH10-R8	5/8	15.88	1/2	12.7	1-1/16	27.0	28.2	38.5	28.5	24.6
	DTH12-R2	3/4	19.05	1/8	15.8	1-1/16	27.0	28.2	38.5	28.5	24.6
	DTH12-R4	3/4	19.05	1/4	15.8	1-1/16	27.0	28.2	38.5	28.5	24.6
	DTH12-R6	3/4	19.05	3/8	15.8	1-1/16	27.0	28.2	38.5	28.5	24.6
DTH12-8	DTH12-R8	3/4	19.05	1/2	15.8	1-1/16	27.0	28.2	38.5	28.5	24.6
DTH12-12	DTH12-R12	3/4	19.05	3/4	15.8	1-5/16	33.3	31.8	42.1	31.8	24.6
DTH14-12		7/8	22.23	3/4	18.3	1-5/16	33.3	32.5	42.7	31.8	31.6
	DTH16-R12	1	25.4	3/4	22.5	1-5/16	33.3	33.3	45.9	31.8	31.6
DTH16-16	DTH16-R16	1	25.4	1	22.5	1-7/8	47.6	38.6	51.2	38.1	31.6

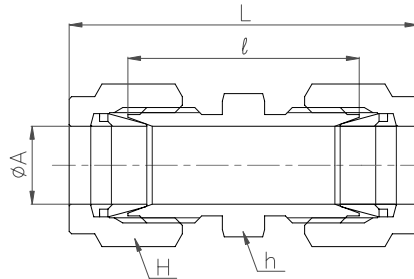
	DUA	Union Connects fractional tubes
--	-----	------------------------------------



H : See dimensional data(Last page)

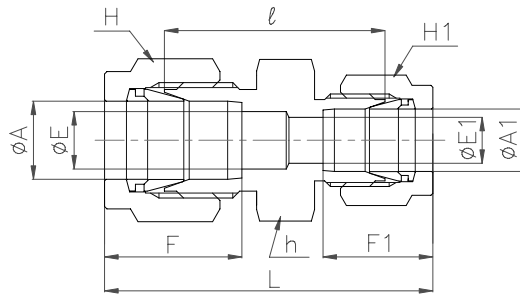
Part No.	A(Tube O. D)		E	h(HEX)		l	L	F
	in	mm	mm	in	mm	mm	mm	mm
DUA 1	1/16	1.59	1.3	5/16	7.94	17.5	25.5	8.9
DUA 2	1/8	3.18	2.3	7/16	11.11	22.4	35.8	13.0
DUA 3	3/16	4.76	3.0	7/16	11.11	24.0	37.4	13.8
DUA 4	1/4	6.35	4.8	1/2	12.7	26.1	41.1	15.4
DUA 5	5/16	7.94	6.4	9/16	14.29	28.0	43.0	16.3
DUA 6	3/8	9.53	7.1	5/8	15.88	30.2	45.2	17.0
DUA 8	1/2	12.7	10.4	13/16	20.64	31.0	51.6	23.0
DUA 10	5/8	15.88	12.7	15/16	23.81	31.8	52.4	24.6
DUA 12	3/4	19.05	15.8	1-1/16	26.99	33.3	53.9	24.6
DUA 14	7/8	22.23	18.3	1-3/16	30.16	35.0	55.9	26.1
DUA 16	1	25.4	22.5	1-3/8	34.93	40.5	65.7	31.6

	DUAZ	Union / Bored-through Connects fractional tubes
--	------	--



Part No.	A(Tube O. D)		h(HEX)		H(HEX)		l	L
	in	mm	in	mm	in	mm	mm	mm
DUAZ 1	1/16	1.59	5/16	7.94	5/16	7.94	17.5	25.5
DUAZ 2	1/8	3.18	7/16	11.11	7/16	11.11	22.4	35.8
DUAZ 3	3/16	4.76	7/16	11.11	1/2	12.7	24.0	37.4
DUAZ 4	1/4	6.35	1/2	12.7	9/16	14.29	26.1	41.1
DUAZ 5	5/16	7.94	9/16	14.29	5/8	15.88	28.0	43.0
DUAZ 6	3/8	9.53	5/8	15.88	11/16	17.46	30.2	45.2
DUAZ 8	1/2	12.7	13/16	20.64	7/8	22.23	31.0	51.6
DUAZ 10	5/8	15.88	15/16	23.81	1	25.4	31.8	52.4
DUAZ 12	3/4	19.05	1-1/16	26.99	1-1/8	28.58	33.3	53.9
DUAZ 14	7/8	22.23	1-3/16	30.16	1-1/4	31.75	35.0	55.9
DUAZ 16	1	25.4	1-3/8	34.93	1-1/2	38.1	40.5	65.7

	DUR	Reducing Union Connects fractional tubes
--	-----	---



H, H<sub>1</sub> : See dimensional data (Last page)

Part No	A (Tube O. D)		A <sub>1</sub> (Tube O. D)		E	E <sub>1</sub>	h (HEX)		ℓ	L	F	F <sub>1</sub>
	in	mm	in	mm	mm	mm	in	mm	mm	mm	mm	mm
DUR 2-1	1/8	3.18	1/16	1.59	2.3	1.3	7/16	11.11	20.6	31.3	13.0	8.9
DUR 3-1	3/16	4.76	1/16	1.59	3.0	1.3	7/16	11.11	21.6	32.3	13.8	8.9
DUR 3-2	3/16	4.76	1/8	3.18	3.0	2.3	7/16	11.11	23.4	36.8	13.8	13.0
DUR 4-1	1/4	6.35	1/16	1.59	4.8	1.3	1/2	12.7	23.1	34.6	15.4	8.9
DUR 4-2	1/4	6.35	1/8	3.18	4.8	2.3	1/2	12.7	24.6	38.8	15.4	13.0
DUR 4-3	1/4	6.35	3/16	4.76	4.8	3.0	1/2	12.7	25.4	39.6	15.4	13.8
DUR 5-4	5/16	7.94	1/4	6.35	6.4	4.8	9/16	14.29	27.4	42.4	16.3	15.4
DUR 6-1	3/8	9.53	1/16	1.59	7.1	1.3	5/8	15.88	25.4	36.9	17.0	8.9
DUR 6-2	3/8	9.53	1/8	3.18	7.1	2.3	5/8	15.88	27.0	41.2	17.0	13.0
DUR 6-4	3/8	9.53	1/4	6.35	7.1	4.8	5/8	15.88	28.4	43.4	17.0	15.4
DUR 6-5	3/8	9.53	5/16	7.94	7.1	6.4	5/8	15.88	29.5	44.5	17.0	16.3
DUR 8-4	1/2	12.7	1/4	6.35	10.4	4.8	13/16	20.64	29.5	47.3	23.0	15.4
DUR 8-6	1/2	12.7	3/8	9.53	10.4	7.1	13/16	20.64	31.0	48.8	23.0	17.0
DUR 10-6	5/8	15.88	3/8	9.53	12.7	7.1	15/16	23.81	31.8	49.6	24.6	17.0
DUR 10-8	5/8	15.88	1/2	12.7	12.7	10.4	15/16	23.81	31.8	52.4	24.6	23.0
DUR 12-6	3/4	19.05	3/8	9.53	15.8	7.1	1-1/16	26.99	33.3	51.1	24.6	17.0
DUR 12-8	3/4	19.05	1/2	12.7	15.8	10.4	1-1/16	26.99	33.3	53.9	24.6	23.0
DUR 12-10	3/4	19.05	5/8	15.88	15.8	12.7	1-1/16	26.99	33.3	53.9	24.6	24.6
DUR 16-12	1	25.4	3/4	19.05	22.5	15.8	1-3/8	34.93	38.1	61.0	31.6	24.6

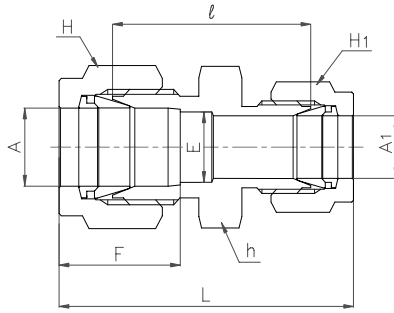
	DUR	Reducing Union Connects fractional tube to metric tube
--	-----	---

H, H<sub>1</sub> : See dimensional data (Last page)

Part No	A <sub>1</sub> (Tube O. D)		A	E	E <sub>1</sub>	h (HEX)		ℓ	L	F	F <sub>1</sub>
	in	mm	mm	mm	mm	in	mm	mm	mm	mm	mm
DUR 2-4M	1/8	3.18	4	2.3	2.7	7/16	11.11	24.0	37.5	13.0	13.9
DUR 4-4M	1/4	6.35	4	4.8	2.7	1/2	12.7	27.0	41.3	15.4	13.9
DUR 4-6M	1/4	6.35	6	4.8	4.8	9/16	14.29	27.3	42.3	15.4	15.4
DUR 4-8M	1/4	6.35	8	4.8	6.4	11/16	17.46	28.6	43.6	15.4	16.3
DUR 4-10M	1/4	6.35	10	4.8	7.9	3/4	19.05	30.6	45.9	15.4	17.3
DUR 6-6M	3/8	9.53	6	7.1	4.8	5/8	15.88	28.4	43.3	17.0	15.4
DUR 6-8M	3/8	9.53	8	7.1	6.4	5/8	15.88	29.5	44.5	17.0	16.3
DUR 6-10M	3/8	9.53	10	7.1	7.9	3/4	19.05	32.0	47.3	17.0	17.3
DUR 6-12M	3/8	9.53	12	7.1	9.5	13/16	20.64	32.0	49.7	17.0	22.9
DUR 8-6M	1/2	12.7	6	10.4	4.8	13/16	20.64	30.5	48.3	23.0	15.4
DUR 8-10M	1/2	12.7	10	10.4	7.9	13/16	20.64	32.0	50.1	23.0	17.3
DUR 8-12M	1/2	12.7	12	10.4	9.5	13/16	20.64	32.0	52.5	23.0	22.9

# DURZ

Reducing Union / Bored-through  
Connects fractional tubes

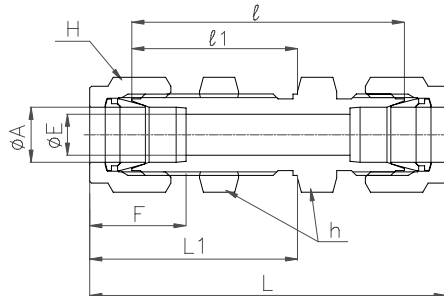


H, H<sub>1</sub> : See dimensional data (Last page)

Part No	A (Tube O. D)		A <sub>1</sub> (Tube O. D)		E	h (HEX)		ℓ	L	F
	in	mm	in	mm	mm	in	mm	mm	mm	mm
DURZ 2-1	1/8	3.18	1/16	1.59	2.3	7/16	11.11	20.6	31.3	13.0
DURZ 4-1	1/4	6.35	1/16	1.59	4.8	1/2	12.7	23.1	34.6	15.4
DURZ 4-2	1/4	6.35	1/8	3.18	4.8	1/2	12.7	24.6	38.8	15.4
DURZ 6-4	3/8	9.53	1/4	6.35	7.1	5/8	15.88	28.4	43.4	17.0
DURZ 8-2	1/2	12.7	1/8	3.18	10.4	13/16	20.64	29.0	49.6	23.0

# DSU

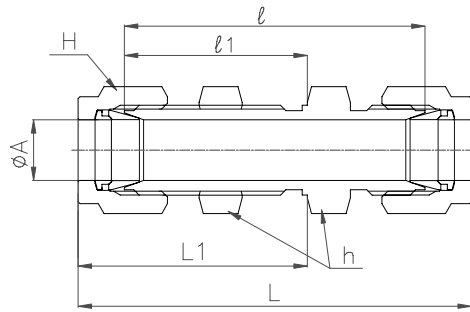
Bulkhead Union  
Connects fractional tubes



H : See dimensional data (Last page)

Part No.	A (Tube O. D)		E	h (HEX)		ℓ	ℓ <sub>1</sub>	L	L <sub>1</sub>	F	Panel	
	in	mm	mm	in	mm	mm	mm	mm	mm	mm	Hole	Thick
DSU 1	1/16	1.59	1.3	5/16	7.94	24.0	13.5	32.0	17.5	8.9	5.2	3.0
DSU 2	1/8	3.18	2.3	1/2	12.7	38.0	24.6	51.4	31.3	13.0	8.3	12.7
DSU 3	3/16	4.76	3.0	9/16	14.29	40.5	25.5	53.9	32.2	13.8	9.9	12.7
DSU 4	1/4	6.35	4.8	5/8	15.88	43.0	26.0	58.0	33.5	15.4	11.5	10.2
DSU 5	5/16	7.94	6.4	11/16	17.46	46.0	28.5	61.0	36.0	16.3	13.1	10.9
DSU 6	3/8	9.53	7.1	3/4	19.05	47.8	29.5	62.8	37.0	17.0	14.7	11.2
DSU 8	1/2	12.7	10.4	15/16	23.81	50.8	32.0	71.4	42.3	23.0	19.4	12.7
DSU 10	5/8	15.88	12.7	1-1/16	26.99	52.5	32.5	73.1	42.8	24.6	22.6	12.7
DSU 12	3/4	19.05	15.8	1-3/16	30.16	58.7	37.3	79.3	47.6	24.6	25.8	16.8
DSU 16	1	25.4	22.5	1-5/8	41.28	71.4	45.2	96.6	57.8	31.6	33.7	19.1

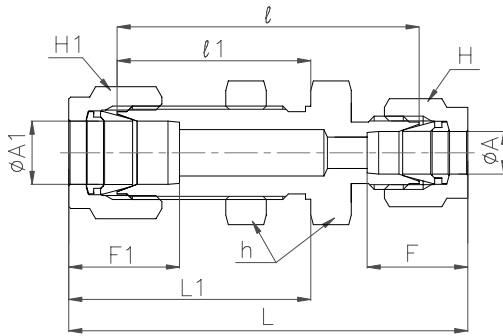
	DSUZ	Bulkhead Union / Bored-through Connects fractional tubes
--	------	---



H : See dimensional data(Last page)

Part No.	A (Tube O. D)		h (HEX)		l	l <sub>1</sub>	L	L <sub>1</sub>	Panel	
	in	mm	in	mm					Hole	Thick
DSUZ 1	1/16	1.59	5/16	7.94	24.0	13.5	32.0	17.5	5.2	3.0
DSUZ 2	1/8	3.18	1/2	12.7	38.0	24.6	51.4	31.3	8.3	12.7
DSUZ 3	3/16	4.76	9/16	14.29	40.5	25.5	53.9	32.2	9.9	12.7
DSUZ 4	1/4	6.35	5/8	15.88	43.0	26.0	58.0	33.5	11.5	10.2
DSUZ 5	5/16	7.94	11/16	17.46	46.0	28.5	61.0	36.0	13.1	10.9
DSUZ 6	3/8	9.53	3/4	19.05	47.8	29.5	62.8	37.0	14.7	11.2
DSUZ 8	1/2	12.7	15/16	23.81	50.8	32.0	71.4	42.3	19.4	12.7
DSUZ 10	5/8	15.88	1-1/16	26.99	52.5	32.5	73.1	42.8	22.6	12.7
DSUZ 12	3/4	19.05	1-3/16	30.16	58.7	37.3	79.3	47.6	25.8	16.8
DSUZ 16	1	25.4	1-5/8	41.28	71.4	45.2	96.6	57.8	33.7	19.1

	DSUR	Bulkhead Reducing Union Connects fractional tubes
--	------	--

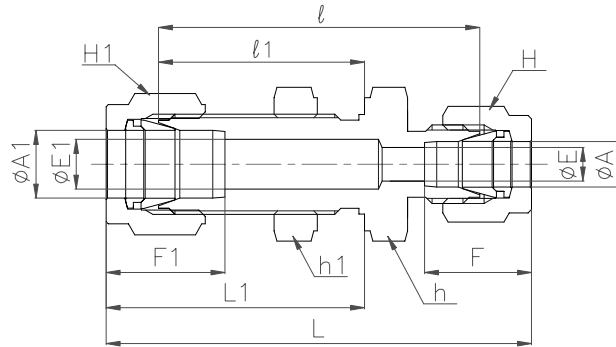


Part No.	Panel	
	Hole	Thick
DSUR 2-4	11.5	10.2
DSUR 4-2	8.3	12.7
DSUR 4-6	14.7	11.2
DSUR 4-8	19.4	12.7
DSUR 6-4	11.5	10.2
DSUR 6-8	19.4	12.7
DSUR 8-4	11.5	10.2
DSUR 8-6	14.7	11.2
DSUR 8-12	25.8	16.8
DSUR 12-8	19.4	12.7

H, H<sub>1</sub> : See dimensional data(Last page)

Part No.	A (Tube O. D)		A <sub>1</sub> (Tube O. D)		E	E <sub>1</sub>	h (HEX)		l	l <sub>1</sub>	L	L <sub>1</sub>	F	F <sub>1</sub>
	in	mm	in	mm			in	mm						
DSUR 2-4	1/8	3.18	1/4	6.35	2.3	4.8	5/8	15.88	41.6	26.0	55.8	33.5	13.0	15.4
DSUR 4-2	1/4	6.35	1/8	3.18	4.8	2.3	1/2	12.7	41.6	24.6	55.8	31.3	15.4	13.0
DSUR 4-6	1/4	6.35	3/8	9.53	4.8	7.1	3/4	19.05	46.0	29.5	61.0	37.0	15.4	17.0
DSUR 4-8	1/4	6.35	1/2	12.7	4.8	10.4	15/16	23.81	49.3	32.0	67.1	42.3	15.4	23.0
DSUR 6-4	3/8	9.53	1/4	6.35	7.1	4.8	5/8	15.88	44.0	26.0	59.0	33.5	17.0	15.4
DSUR 6-8	3/8	9.53	1/2	12.7	7.1	10.4	15/16	23.81	50.8	32.0	68.6	42.3	17.0	23.0
DSUR 8-4	1/2	12.7	1/4	6.35	10.4	4.8	13/16	20.64	44.8	26.0	62.6	33.5	23.0	15.4
DSUR 8-6	1/2	12.7	3/8	9.53	10.4	7.1	13/16	20.64	48.3	29.5	66.1	37.0	23.0	17.0
DSUR 8-12	1/2	12.7	3/4	19.05	10.4	15.8	1-3/16	30.16	58.7	37.3	79.3	47.6	23.0	24.6
DSUR 12-8	3/4	19.05	1/2	12.7	15.8	10.4	1-1/16	26.99	53.4	32.0	74.0	42.3	24.6	23.0

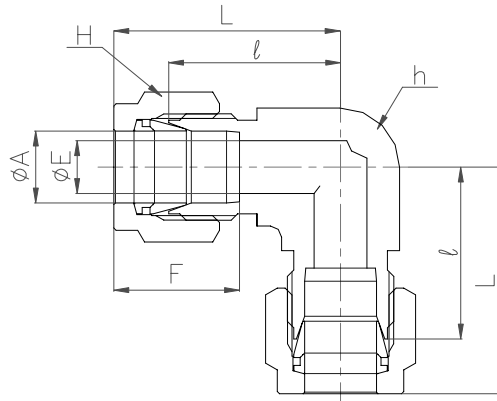
	DSUR	Bulkhead Reducing Union Connects fractional tube to metric tube
--	------	--



H, H<sub>1</sub> : See dimensional data (Last page)

Part No.	A (Tube O. D)		A <sub>1</sub>	E	E <sub>1</sub>	h (HEX)		ℓ	ℓ <sub>1</sub>	L	L <sub>1</sub>	F	F <sub>1</sub>	Panel	
	in	mm	mm	mm	mm	in	mm	mm	mm	mm	mm	mm	mm	Hole	Thick
DSUR 4-8M	1/4	6.35	8	4.8	6.4	3/4	19.05	45.6	28.5	60.6	36.0	15.4	16.3	13.1	11.4

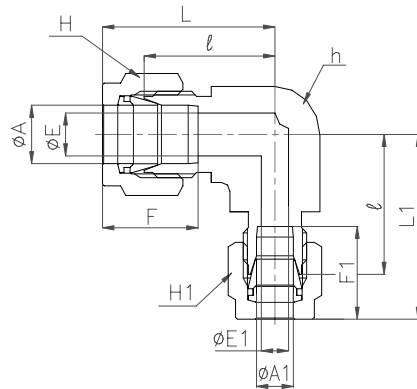
	DLA	Union Elbow Connects fractional tubes
--	-----	--



H : See dimensional data (Last page)

Part No.	A (Tube O. D)		E	h (Flat)		ℓ	L	F
	in	mm	mm	in	mm	mm	mm	mm
DLA 1	1/16	1.59	1.3	3/8	9.5	14.2	18.2	8.9
DLA 2	1/8	3.18	2.3	3/8	9.5	15.8	22.5	13.0
DLA 3	3/16	4.76	3.0	1/2	12.7	19.0	25.7	13.8
DLA 4	1/4	6.35	4.8	1/2	12.7	20.0	27.5	15.4
DLA 5	5/16	7.94	6.4	5/8	15.9	22.4	29.9	16.3
DLA 6	3/8	9.53	7.1	5/8	15.9	23.0	30.5	17.0
DLA 8	1/2	12.7	10.4	13/16	20.6	25.0	35.3	23.0
DLA 10	5/8	15.88	12.7	15/16	23.8	27.0	37.3	24.6
DLA 12	3/4	19.05	15.8	1-1/16	27.0	28.2	38.5	24.6
DLA 14	7/8	22.23	18.3	1-1/4	31.8	32.5	42.7	26.1
DLA 16	1	25.4	22.5	1-5/16	33.3	33.3	45.9	31.6

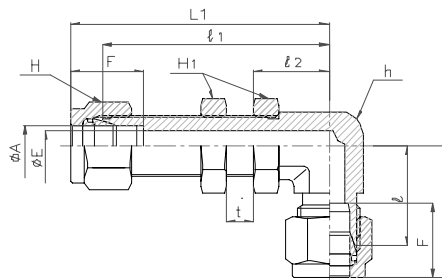
	DLR	Reducing Union Elbow Connects fractional tubes
--	-----	---



H, H<sub>1</sub> : See dimensional data(Last page)

Part No.	A(Tube O.D)		A <sub>1</sub> (Tube O.D)		E	E <sub>1</sub>	h(Flat)		l	L	L <sub>1</sub>	F	F <sub>1</sub>
	in	mm	in	mm	mm	mm	in	mm	mm	mm	mm	mm	mm
DLR 6-4	3/8	9.53	1/4	6.35	7.1	4.8	5/8	15.9	23.0	30.5	30.5	17.0	15.4
DLR 6-5	3/8	9.53	5/16	7.94	7.1	6.4	5/8	15.9	23.0	30.5	30.5	17.0	16.3
DLR 8-6	1/2	12.7	3/8	9.53	10.4	7.1	13/16	20.6	25.0	35.2	32.4	23.0	17.0
DLR 12-4	3/4	19.05	1/4	6.35	15.8	4.8	1-1/16	27.0	28.2	38.5	35.7	24.6	15.4
DLR 12-6	3/4	19.05	3/8	9.53	15.8	7.1	1-1/16	27.0	28.2	38.5	35.7	24.6	17.0
DLR 12-8	3/4	19.05	1/2	12.7	15.8	10.4	1-1/16	27.0	28.2	38.5	38.5	24.6	23.0

	DSL	Bulkhead Union Elbow Connects fractional tubes
--	-----	---



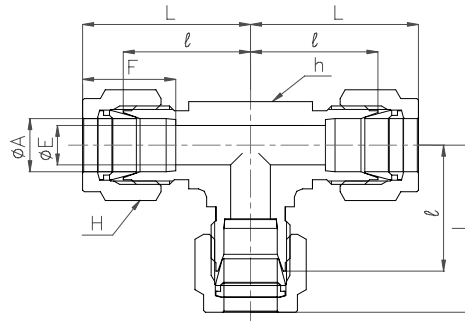
H : See dimensional data(Last page)

Part No	A(Tube O.D)		E	h(Flat)		H <sub>1</sub> (HEX)		l	l <sub>1</sub>	l <sub>2</sub>	L	L <sub>1</sub>	F	Panel	
	in	mm	mm	in	mm	in	mm	mm	mm	mm	mm	mm	mm	Hole	Thick
DSL 2	1/8	3.18	2.3	3/8	9.5	1/2	12.7	15.8	42.5	14.5	22.5	49.2	13.0	8.3	15.2
DSL 3	3/16	4.76	3.0	1/2	12.7	9/16	14.29	19.0	45.0	15.5	25.7	51.7	13.8	9.9	15.5
DSL 4	1/4	6.35	4.8	1/2	12.7	5/8	15.88	20.0	46.0	16.0	27.5	53.5	15.4	11.5	15.5
DSL 5	5/16	7.94	6.4	5/8	15.9	11/16	17.46	22.5	51.5	17.5	30.0	59.0	16.3	13.1	18.8
DSL 6	3/8	9.53	7.1	5/8	15.9	3/4	19.05	23.0	52.5	17.5	30.5	60.0	17.0	14.7	18.8
DSL 8	1/2	12.7	10.4	13/16	20.6	15/16	23.81	24.0	57.5	20.5	34.3	67.8	23.0	19.4	18.8
DSL 10	5/8	15.88	12.7	15/16	23.8	1-1/16	26.99	27.0	61.5	23.5	37.3	71.8	24.6	22.6	12.7
DSL 12	3/4	19.05	15.8	1-1/16	27.0	1-3/16	30.16	28.2	68.0	25.5	38.5	78.3	24.6	25.8	16.8



# DTA

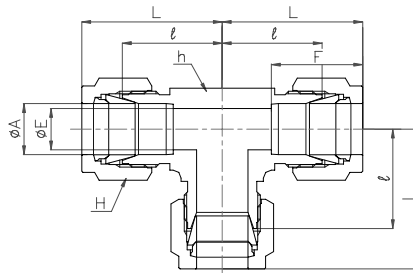
Union Tee  
Connects fractional tubes



Part	A(Tube O. D)		E	h(Flat)		H(HEX)		l	L	F
	in	mm		in	mm	in	mm			
DTA 1	1/16	1.59	1.3	3/8	9.5	5/16	7.94	14.2	18.2	8.9
DTA 2	1/8	3.18	2.3	3/8	9.5	7/16	11.11	15.8	22.5	13.0
DTA 3	3/16	4.76	3.0	1/2	12.7	1/2	12.7	19.0	25.7	13.8
DTA 4	1/4	6.35	4.8	1/2	12.7	9/16	14.29	20.0	27.5	15.4
DTA 5	5/16	7.94	6.4	5/8	15.9	5/8	15.88	22.4	29.9	16.3
DTA 6	3/8	9.53	7.1	5/8	15.9	11/16	17.46	23.0	30.5	17.0
DTA 8	1/2	12.7	10.4	13/16	20.6	7/8	22.23	25.0	35.3	23.0
DTA 10	5/8	15.88	12.7	15/16	23.8	1	25.4	27.0	37.3	24.6
DTA 12	3/4	19.05	15.8	1-1/16	27.0	1-1/8	28.58	28.2	38.5	24.6
DTA 14	7/8	22.23	18.3	1-1/4	31.8	1-1/4	31.75	32.5	42.7	26.1
DTA 16	1	25.4	22.5	1-5/16	33.3	1-1/2	38.1	33.3	45.9	31.6

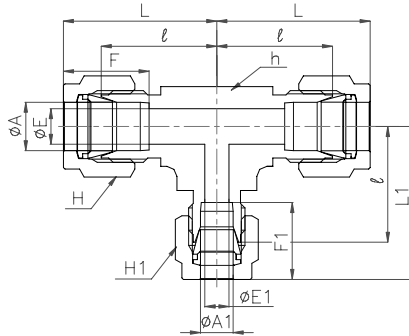
# DTAZ

Union Tee / Bored-through  
Connects fractional tubes



Part No.	A(Tube O. D)		E	h(Flat)		H(HEX)		l	L	F
	in	mm		in	mm	in	mm			
DTAZ 4	1/4	6.35	4.8	1/2	12.7	9/16	14.29	20.0	27.5	15.4
DTAZ 6	3/8	9.52	7.1	5/8	15.9	11/16	17.46	23.0	30.5	17.0

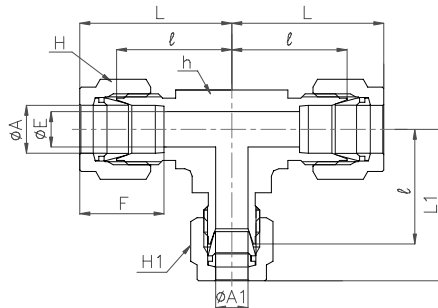
	DTR	Reducing Union Tee Connects fractional tubes
--	-----	---



H, H<sub>1</sub> : See dimensional data(Last page)

Part No.	A(Tube O. D)		A <sub>1</sub> (Tube O. D)		E	E <sub>1</sub>	h(Flat)		ℓ	L	L <sub>1</sub>	F	F <sub>1</sub>
	in	mm	in	mm	mm	mm	in	mm	mm	mm	mm	mm	mm
DTR 4-6	1/4	6.35	3/8	9.53	4.8	7.1	5/8	15.9	23.0	30.5	30.5	15.4	17.0
DTR 4-8	1/4	6.35	1/2	12.7	4.8	10.4	13/16	20.6	25.0	32.5	35.3	15.4	23.0
DTR 6-4	3/8	9.53	1/4	6.35	7.1	4.8	5/8	15.9	23.0	30.5	30.5	17.0	15.4
DTR 6-5	3/8	9.53	5/16	7.94	7.1	6.4	5/8	15.9	23.0	30.5	30.5	17.0	16.3
DTR 8-2	1/2	12.7	1/8	3.18	10.4	2.3	13/16	20.6	25.0	35.3	31.7	23.0	13.0
DTR 8-4	1/2	12.7	1/4	6.35	10.4	4.8	13/16	20.6	25.0	35.3	32.5	23.0	15.4
DTR 8-6	1/2	12.7	3/8	9.53	10.4	7.1	13/16	20.6	25.0	35.3	32.5	23.0	17.0
DTR 8-12	1/2	12.7	3/4	19.05	10.4	15.8	1-1/16	27.0	28.2	38.5	38.5	23.0	24.6
DTR 10-6	5/8	15.88	3/8	9.53	12.7	7.1	15/16	23.8	27.0	37.3	34.5	24.6	17.0
DTR 12-4	3/4	19.05	1/4	6.35	15.8	4.8	1-1/16	27.0	28.2	38.5	35.7	24.6	15.4
DTR 12-6	3/4	19.05	3/8	9.53	15.8	7.1	1-1/16	27.0	28.2	38.5	35.7	24.6	17.0
DTR 12-8	3/4	19.05	1/2	12.7	15.8	10.4	1-1/16	27.0	28.2	38.5	38.5	24.6	23.0
DTR 12-16	3/4	19.05	1	25.4	15.8	22.5	1-5/16	33.3	33.3	43.6	45.9	24.6	31.6
DTR 14-6	7/8	22.23	3/8	9.53	18.3	7.1	1-1/4	31.8	32.5	42.7	40.0	26.1	17.0
DTR 14-8	7/8	22.23	1/2	12.7	18.3	10.4	1-1/4	31.8	32.5	42.7	42.8	26.1	23.0
DTR 14-12	7/8	22.23	3/4	19.05	18.3	15.8	1-1/4	31.8	32.5	42.7	42.8	26.1	24.6
DTR 16-6	1	25.4	3/8	9.53	22.5	7.1	1-5/16	33.3	33.3	45.9	40.8	31.6	17.0
DTR 16-8	1	25.4	1/2	12.7	22.5	10.4	1-5/16	33.3	33.3	45.9	43.6	31.6	23.0
DTR 16-12	1	25.4	3/4	19.05	22.5	15.8	1-5/16	33.3	33.3	45.9	43.6	31.6	24.6
DTR 16-14	1	25.4	7/8	22.23	22.5	18.3	1-5/16	33.3	33.3	45.9	43.5	31.6	26.1

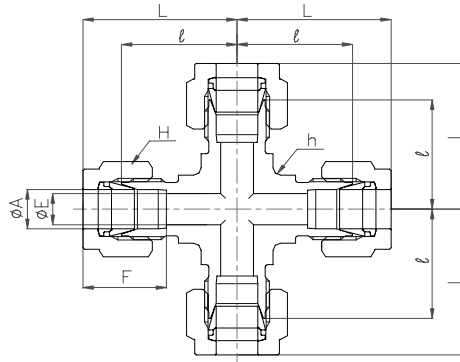
	DTRZ	Reducing Union Tee / Bored-through Connects fractional tubes
--	------	---



H, H<sub>1</sub> : See dimensional data(Last page)

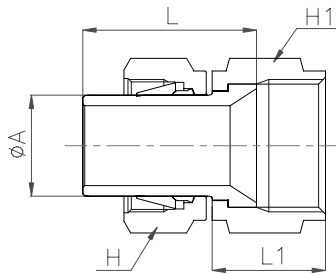
Part No.	A(Tube O. D)		A <sub>1</sub> (Tube O. D)		E	h(Flat)		ℓ	L	L <sub>1</sub>	F
	in	mm	in	mm	mm	in	mm	mm	mm	mm	mm
DTRZ 8-2	1/2	12.7	1/8	3.18	10.4	13/16	20.6	25.0	35.3	31.7	23.0

	DXA	Union Cross Connects fractional tubes
--	-----	--



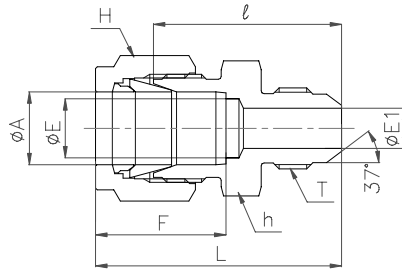
Part No.	A (Tube O. D)		E mm	h (Flat)		H (HEX)		l mm	L mm	F mm
	in	mm		in	mm	in	mm			
DXA 1	1/16	1.59	1.3	3/8	9.5	5/16	7.94	14.2	18.2	8.9
DXA 2	1/8	3.18	2.3	3/8	9.5	7/16	11.11	15.8	22.5	13.0
DXA 3	3/16	4.76	3.0	1/2	12.7	1/2	12.7	19.0	25.7	13.8
DXA 4	1/4	6.35	4.8	1/2	12.7	9/16	14.29	20.0	27.5	15.4
DXA 5	5/16	7.94	6.4	5/8	15.9	5/8	15.88	22.4	29.9	16.3
DXA 6	3/8	9.53	7.1	5/8	15.9	11/16	17.46	23.0	30.5	17.0
DXA 8	1/2	12.7	10.4	13/16	20.6	7/8	22.23	25.0	35.3	23.0
DXA 10	5/8	15.88	12.7	15/16	23.8	1	25.4	27.0	37.3	24.6
DXA 12	3/4	19.05	15.8	1-1/16	27.0	1-1/8	28.58	28.2	38.5	24.6
DXA 16	1	25.4	22.5	1-3/8	34.9	1-1/2	38.1	33.3	45.9	31.6

	DAN	Bi-lok to AN Adapter Connects fractional tube to male 37° flared tube
--	-----	--



Part No.	A (Tube O. D)		AN (Tube O. D)		H (HEX)		H <sub>1</sub> (HEX)		L <sub>1</sub> mm	L <sub>2</sub> mm
	in	mm	in	mm	in	mm	in	mm		
DAN 2-2	1/8	3.18	1/8	3.18	7/16	11.11	3/8	9.53	19.6	13.8
DAN 4-4	1/4	6.35	1/4	6.35	9/16	14.29	9/16	14.29	22.3	15.7
DAN 6-6	3/8	9.53	3/8	9.53	11/16	17.46	11/16	17.46	25.3	18.3
DAN 8-8	1/2	12.7	1/2	12.7	7/8	22.23	7/8	22.23	32.0	21.3
DAN 16-16	1	25.4	1	25.4	1-1/2	38.1	1-1/2	38.1	43.5	28.4

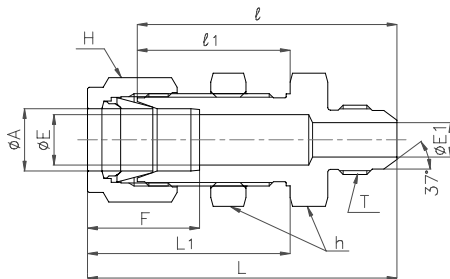
	DUC	AN Union Connects fractional tube to 37° flared tube
--	-----	---



H : See dimensional data(Last page)

Part No.	A (Tube O. D)		AN (Tube O. D)		T UNF	E mm	E <sub>1</sub> mm	h (HEX)		ℓ mm	L mm	F mm
	in	mm	in	mm				in	mm			
DUC 1-2	1/16	1.59	1/8	3.18	5/16-24	1.3	1.3	7/16	11.11	23.4	27.4	8.9
DUC 1-4	1/16	1.59	1/4	6.35	7/16-20	1.3	4.3	1/2	12.7	27.0	31.0	8.9
DUC 2-2	1/8	3.18	1/8	3.18	5/16-24	2.3	1.5	7/16	11.11	24.9	31.6	13.0
DUC 2-4	1/8	3.18	1/4	6.35	7/16-20	2.3	4.3	1/2	12.7	28.4	35.1	13.0
DUC 4-2	1/4	6.35	1/8	3.18	5/16-24	4.8	1.5	1/2	12.7	27.5	35.0	15.4
DUC 4-4	1/4	6.35	1/4	6.35	7/16-20	4.8	4.3	1/2	12.7	30.2	37.7	15.4
DUC 5-5	5/16	7.94	5/16	7.94	1/2-20	6.0	6.0	9/16	14.29	31.3	38.8	16.3
DUC 6-4	3/8	9.53	1/4	6.35	7/16-20	7.1	4.3	5/8	15.88	32.3	39.8	17.0
DUC 6-6	3/8	9.53	3/8	9.53	9/16-18	7.1	7.1	5/8	15.88	32.3	39.8	17.0
DUC 8-6	1/2	12.7	3/8	9.53	9/16-18	10.4	7.1	13/16	20.64	33.0	43.3	23.0
DUC 8-8	1/2	12.7	1/2	12.7	3/4-16	10.4	9.9	13/16	20.64	35.6	45.9	23.0
DUC 10-8	5/8	15.88	1/2	12.7	3/4-16	12.7	9.9	15/16	23.81	36.5	46.8	24.6
DUC 10-10	5/8	15.88	5/8	15.88	7/8-14	12.7	12.7	15/16	23.81	39.2	49.5	24.6
DUC 12-8	3/4	19.05	1/2	12.7	3/4-16	15.8	9.9	1-1/8	28.58	39.0	49.3	24.6
DUC 12-12	3/4	19.05	3/4	19.05	1-1/16-12	15.8	15.8	1-1/8	28.58	44.2	54.5	24.6
DUC 16-12	1	25.4	3/4	19.05	1-1/16-12	22.5	15.5	1-3/8	34.93	48.1	60.7	31.6
DUC 16-16	1	25.4	1	25.4	1-5/16-12	22.5	21.5	1-3/8	34.93	49.3	61.9	31.6

	DUE	AN Bulkhead Union Connects fractional tube to 37° flared tube
--	-----	--

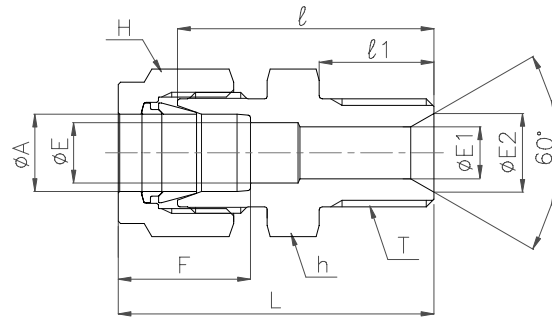


H : See dimensional data(Last page)

Part No.	A (Tube O. D)		AN (Tube O. D)		T UNF	E mm	E <sub>1</sub> mm	h (HEX)		ℓ mm	ℓ <sub>1</sub> mm	L mm	L <sub>1</sub> mm	F mm	Panel	
	in	mm	in	mm				in	mm						Hole	Thick
DUE 2-2	1/8	3.18	1/8	3.18	5/16-24	2.3	1.5	1/2	12.7	41.0	24.6	47.7	31.3	13.0	8.3	12.7
DUE 4-4	1/4	6.35	1/4	6.35	7/16-20	4.8	4.3	5/8	15.88	46.5	26.0	54.0	33.5	15.4	11.5	10.2
DUE 6-4	3/8	9.53	1/4	6.35	7/16-20	7.1	4.3	3/4	19.05	49.9	29.5	57.3	37.0	17.0	11.5	10.2
DUE 6-6	3/8	9.53	3/8	9.53	9/16-18	7.1	7.1	3/4	19.05	49.8	29.5	57.3	37.0	17.0	14.7	11.2
DUE 8-6	1/2	12.7	3/8	9.53	9/16-18	10.4	7.1	15/16	23.81	53.0	32.0	63.3	42.3	23.0	14.7	11.2
DUE 8-8	1/2	12.7	1/2	12.7	3/4-16	10.4	9.9	15/16	23.81	55.7	32.0	66.0	42.3	23.0	19.4	12.7
DUE 12-12	3/4	19.05	3/4	19.05	1-1/16-12	15.8	15.8	1-3/16	30.16	68.8	37.3	79.1	47.6	24.6	25.8	16.8
DUE 16-16	1	25.4	1	25.4	1-5/16-12	22.5	21.5	1-5/8	41.28	80.2	45.2	92.8	57.8	31.6	33.7	19.1

**DUD**

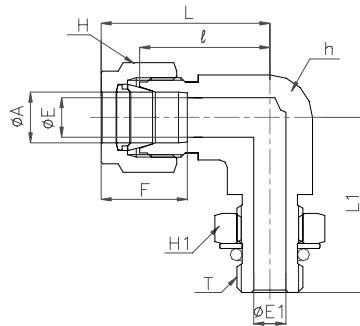
**Male Connector /for 30° Hose Adapter**  
**Connects fractional tube to 30° Hose Adapter (ISO parallel thread)**



H : See dimensional data (Last page)

Part No.	A (Tube O. D)		T	E	E <sub>1</sub>	E <sub>2</sub>	h (HEX)		l	l <sub>1</sub>	L	F
	in	mm	G	mm	mm	mm	in	mm	mm	mm	mm	mm
DUD 6-G4	3/8	9.53	1/4	7.1	6.0	9.5	5/8	15.88	32.5	14.0	40.0	17.0
DUD 8-G4	1/2	12.7	1/4	10.4	6.0	9.5	13/16	20.64	34.0	14.0	44.0	23.0

	DLO	Positional Male Elbow Connects fractional tube to UNF straight thread
--	-----	--



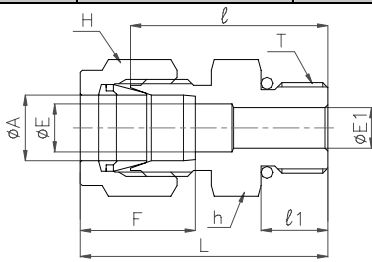
H : See dimensional data(Last page)

Part No.	A(Tube O. D)		T	E	E <sub>1</sub>	h(Flat)		H <sub>1</sub> (HEX)		ℓ	L	L <sub>1</sub>	F	O-ring AS568 (フッ素ゴム)
	in	mm	UNF	mm	mm	in	mm	in	mm	mm	mm	mm	mm	
DLO 4-4	1/4	6.35	7/16-20	4.8	4.8	5/8	15.9	9/16	14.29	21.0	28.5	28.5	15.4	-904
DLO 4-6	1/4	6.35	9/16-18	4.8	7.1	5/8	15.9	11/16	17.46	23.0	30.5	32.5	15.4	-906
DLO 5-5	5/16	7.94	1/2-20	6.4	6.4	5/8	15.9	5/8	15.88	23.0	30.5	29.5	16.3	-905
DLO 6-6	3/8	9.53	9/16-18	7.1	7.1	5/8	15.9	11/16	17.46	24.5	32.0	32.5	17.0	-906
DLO 6-8	3/8	9.53	3/4-16	7.1	10.4	13/16	20.6	7/8	22.23	27.5	35.0	38.0	17.0	-908
DLO 8-8	1/2	12.7	3/4-16	10.4	10.4	13/16	20.6	7/8	22.23	27.5	37.8	38.0	23.0	-908

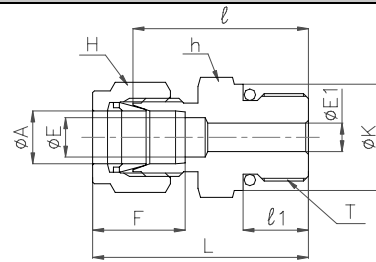
	DLO	Positional Male Elbow Connects fractional tube to ISO/parallel thread
--	-----	--

Part No.	A(Tube O. D)		T	E	E <sub>1</sub>	h(Flat)		H <sub>1</sub> (HEX)		ℓ	L	L <sub>1</sub>	F	O-ring JIS B 2401 (フッ素ゴム)
	in	mm	G	mm	mm	in	mm	in	mm	mm	mm	mm	mm	
DLO 4-G4	1/4	6.35	1/4	4.8	6.4	5/8	15.9	3/4	19.05	21.5	29.0	32.5	15.4	4D-P11
DLO 6-G4	3/8	9.53	1/4	7.1	6.4	5/8	15.9	3/4	19.05	23.0	30.5	32.5	17.0	4D-P11
DLO 6-G6	3/8	9.53	3/8	7.1	7.9	13/16	20.6	-	22.0	26.0	33.5	37.0	17.0	4D-P14
DLO 8-G4	1/2	12.7	1/4	10.4	6.4	13/16	20.6	3/4	19.05	26.0	36.3	35.0	23.0	4D-P11
DLO 8-G6	1/2	12.7	3/8	10.4	7.9	13/16	20.6	-	22.0	26.0	36.3	37.0	23.0	4D-P14
DLO 8-G8	1/2	12.7	1/2	10.4	12.0	13/16	20.6	1-1/16	26.99	28.0	38.3	43.5	23.0	4D-P18

	DCU	O-ring seal Male Connector Connects fractional tube to UNF straight thread
--	-----	---



**UNF straight thread**



**ISO/straight thread**

H : See dimensional data(Last page)

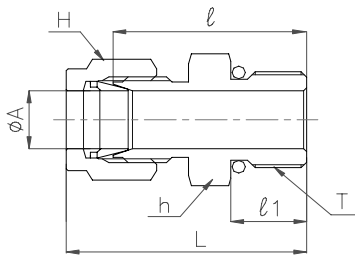
Part No.	A(Tube O. D)		T	E	E <sub>1</sub>	h(HEX)		l	l <sub>1</sub>	L	F	O-ring AS568 (NBR)
	in	mm	UNF	mm	mm	in	mm	mm	mm	mm	mm	
DCU 2-2	1/8	3.18	5/16-24	2.3	2.3	7/16	11.11	23.4	7.5	30.1	13.0	-902
DCU 2-4	1/8	3.18	7/16-20	2.3	4.8	9/16	14.29	24.9	9.0	31.6	13.0	-904
DCU 4-2	1/4	6.35	5/16-24	4.8	3.5	1/2	12.7	25.4	7.5	32.9	15.4	-902
DCU 4-4	1/4	6.35	7/16-20	4.8	4.8	9/16	14.29	26.7	9.0	34.2	15.4	-904
DCU 4-6	1/4	6.35	9/16-18	4.8	4.8	11/16	17.46	28.2	10.0	35.7	15.4	-906
DCU 4-8	1/4	6.35	3/4-16	4.8	4.8	7/8	22.23	30.0	11.0	37.5	15.4	-908
DCU 4-10	1/4	6.35	7/8-14	4.8	10.4	1	25.4	33.0	12.5	40.5	15.4	-910
DCU 6-4	3/8	9.53	7/16-20	7.1	5.1	5/8	15.88	28.2	9.0	35.7	17.0	-904
DCU 6-6	3/8	9.53	9/16-18	7.1	7.1	11/16	17.46	29.7	10.0	37.2	17.0	-906
DCU 6-8	3/8	9.53	3/4-16	7.1	7.1	7/8	22.23	31.8	11.0	39.3	17.0	-908
DCU 6-10	3/8	9.53	7/8-14	7.1	10.4	1	25.4	35.0	12.5	42.5	17.0	-910
DCU 8-6	1/2	12.7	9/16-18	10.4	7.1	7/8	22.23	29.0	10.0	39.3	23.0	-906
DCU 8-8	1/2	12.7	3/4-16	10.4	10.4	13/16	22.23	31.8	11.0	42.1	23.0	-908
DCU 8-10	1/2	12.7	7/8-14	10.4	10.4	1	25.4	35.1	12.5	45.4	23.0	-910
DCU 8-12	1/2	12.7	1-1/16-12	10.4	10.4	1-1/4	31.75	38.9	15.0	49.2	23.0	-912
DCU10-8	5/8	15.88	3/4-16	12.7	10.7	15/16	23.81	31.8	11.0	42.1	24.6	-908
DCU10-10	5/8	15.88	7/8-14	12.7	12.7	1	25.4	35.1	12.5	45.4	24.6	-910
DCU12-8	3/4	19.05	3/4-16	15.8	10.7	1-1/16	26.99	32.8	11.0	43.1	24.6	-908
DCU12-12	3/4	19.05	1-1/16-12	15.8	15.8	1-1/4	31.75	38.9	15.0	49.2	24.6	-912
DCU16-12	1	25.4	1-1/16-12	22.5	16.8	1-3/8	34.93	41.4	15.0	54.0	31.6	-912
DCU16-16	1	25.4	1-5/16-12	22.5	22.5	1-1/2	38.1	42.2	15.0	54.8	31.6	-916

	DCU	O-ring seal Male Connector Connects fractional tube to ISO/straight thread
--	-----	---

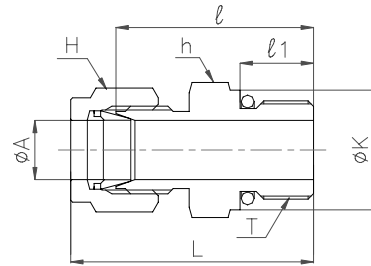
H : See dimensional data(Last page)

Part No.	A(Tube O. D)		T	E	E <sub>1</sub>	h(HEX)		l	l <sub>1</sub>	L	K	F	O-ring JIS B 2401 (NBR)
	in	mm	G	mm	mm	in	mm	mm	mm	mm	mm	mm	
DCU 4-G2	1/4	6.35	1/8	4.8	4.0	9/16	14.29	27.0	8.0	34.5	14.0	15.4	1B-P 8
DCU 4-G4	1/4	6.35	1/4	4.8	6.4	3/4	19.05	31.0	12.0	38.5	19.0	15.4	11
DCU 4-G6	1/4	6.35	3/8	4.8	4.8	7/8	22.23	31.4	12.0	38.9	22.0	15.4	14
DCU 6-G4	3/8	9.53	1/4	7.1	6.4	3/4	19.05	32.8	12.0	40.3	19.0	17.0	11
DCU 6-G6	3/8	9.53	3/8	7.1	7.1	7/8	22.23	32.8	12.0	40.3	22.0	17.0	14
DCU 6-G8	3/8	9.53	1/2	7.1	12.0	1-1/16	26.99	39.0	14.0	46.5	26.5	17.0	18
DCU 8-G4	1/2	12.7	1/4	10.4	6.4	13/16	20.64	33.0	12.0	43.3	19.0	23.0	11
DCU 8-G6	1/2	12.7	3/8	10.4	10.4	7/8	22.23	32.8	12.0	43.1	22.0	23.0	14
DCU 8-G8	1/2	12.7	1/2	10.4	12.0	1-1/16	26.99	39.0	14.0	49.3	26.5	23.0	18
DCU 8-G12	1/2	12.7	3/4	10.4	15.8	1-1/4	31.75	42.7	16.0	53.0	31.5	23.0	24
DCU12-G4	3/4	19.05	1/4	15.8	6.4	1-1/16	26.99	35.8	12.0	46.1	19.0	24.6	11
DCU12-G6	3/4	19.05	3/8	15.8	15.8	1-1/16	26.99	33.8	12.0	44.1	22.0	24.6	14
DCU12-G8	3/4	19.05	1/2	15.8	12.0	1-1/16	26.99	39.0	14.0	49.3	26.5	24.6	18
DCU12-G12	3/4	19.05	3/4	15.8	15.8	1-1/4	31.75	42.7	16.0	53.0	31.5	24.6	24

	DCUZ	O-ring seal Male Connector/ Bored-through Connects fractional tube to UNF straight thread
--	------	--



**UNF straight thread**



**ISO/G straight thread**

H : See dimensional data(Last page)

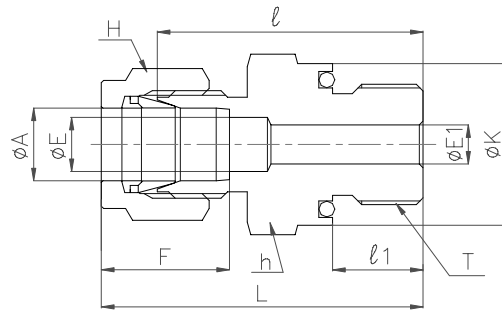
Part No.	A (Tube O. D)		T	E	h (HEX)		l	l <sub>1</sub>	L	O-ring AS568 (NBR)
	in	mm	UNF	mm	in	mm	mm	mm	mm	
DCUZ 2-8	1/8	3.18	3/4-16	4.8	7/8	22.23	27.0	11.0	33.7	-908
DCUZ 4-8	1/4	6.35	3/4-16	4.8	7/8	22.23	30.0	11.0	37.5	-908
DCUZ 6-10	3/8	9.53	7/8-14	10.4	1	25.4	35.0	12.5	42.5	-910

	DCUZ	O-ring seal Male Connector/ Bored thru Connects fractional tube to ISO/G straight thread
--	------	---

Part No.	A (Tube O. D)		T	h (HEX)		l	l <sub>1</sub>	L	K	O-ring JIS B 2401 (NBR)
	in	mm	G	in	mm	mm	mm	mm	mm	
DCUZ 2-G4	1/8	3.17	1/4	3/4	19.05	29.4	12.0	36.1	19.0	1B-P11
DCUZ 4-G4	1/4	6.35	1/4	3/4	19.05	31.0	12.0	38.5	19.0	11
DCUZ 4-G12	1/4	6.35	3/4	1-1/4	31.75	41.1	16.0	48.6	31.5	24
DCUZ 6-G6	3/8	9.52	3/8	7/8	22.23	32.8	12.0	40.3	22.0	14
DCUZ12-G12	3/4	19.05	3/4	1-1/4	31.75	42.7	16.0	53.0	31.5	24



	<b>DCO</b>	<b>O-ring seal Male Connector/ straight thread</b> Connects Fractional tube to UNF straight thread
--	------------	---



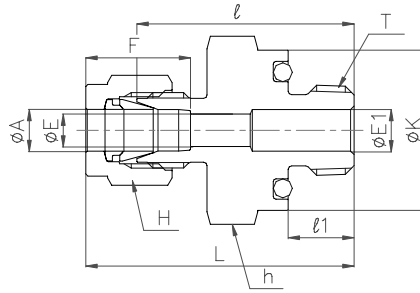
H : See dimensional data(Last page)

Part No.	A(Tube O. D)		T	E	E <sub>1</sub>	K	h(HEX)		ℓ	ℓ <sub>1</sub>	L	F	O-ring AS568 (NBR)
	in	mm	UNF	mm	mm	mm	in	mm	mm	mm	mm	mm	
DCO 1-2	1/16	1.59	5/16-24	1.3	2.3	14.0	9/16	14.29	22.9	8.6	26.9	8.9	-011
DCO 2-2	1/8	3.18	5/16-24	2.3	2.3	14.0	9/16	14.29	26.0	8.6	32.7	13.0	-011
DCO 3-3	3/16	4.76	3/8-24	3.0	3.0	15.4	5/8	15.88	28.0	9.7	34.7	13.8	-012
DCO 4-4	1/4	6.35	7/16-20	4.8	4.8	18.5	3/4	19.05	31.2	10.4	38.7	15.4	-111
DCO 5-5	5/16	7.94	1/2-20	6.4	6.4	21.9	7/8	22.23	33.5	11.2	41.0	16.3	-112
DCO 6-6	3/8	9.53	9/16-18	7.1	7.1	23.6	15/16	23.81	35.0	11.9	42.5	17.0	-113
DCO 8-8	1/2	12.7	3/4-16	10.4	10.4	28.0	1-1/8	28.58	35.8	11.9	46.1	23.0	-116
DCO12-12	3/4	19.05	1-1/16-12	15.8	15.8	37.6	1-1/2	38.1	42.0	14.2	52.3	24.6	-215
DCO16-16	1	25.4	1-5/16-12	22.5	22.5	44.0	1-3/4	44.45	46.0	14.2	58.6	31.6	-219

	<b>DCO</b>	<b>O-ring seal Male Connector/ straight thread</b> Connects fractional tube to ISO straight thread
--	------------	---

Part No.	A(Tube O. D)		T	E	E <sub>1</sub>	K	h(HEX)		ℓ	ℓ <sub>1</sub>	L	F	O-ring JIS B 2401 (フッ素ゴム)
	in	mm	G	mm	mm	mm	in	mm	mm	mm	mm	mm	
DCO 4-G2	1/4	6.35	1/8	4.8	4.0	18.5	3/4	19.05	29.0	8.0	36.4	15.4	4D-P11
DCO 4-G4	1/4	6.35	1/4	4.8	6.4	23.5	15/16	23.81	32.8	12.0	40.3	15.4	15
DCO 4-G6	1/4	6.35	3/8	4.8	7.9	26.5	1-1/16	26.99	34.0	12.0	41.5	15.4	18
DCO 6-G4	3/8	9.53	1/4	7.1	6.4	23.5	15/16	23.81	35.0	12.0	42.5	17.0	15
DCO 6-G6	3/8	9.53	3/8	7.1	7.1	26.5	1-1/16	26.99	36.0	12.0	43.5	17.0	18
DCO 6-G8	3/8	9.53	1/2	7.1	12.0	31.5	1-1/4	31.75	41.0	14.0	48.5	17.0	22
DCO 8-G4	1/2	12.7	1/4	10.4	6.4	23.5	15/16	23.81	35.0	12.0	45.3	23.0	15
DCO 8-G6	1/2	12.7	3/8	10.4	7.9	26.5	1-1/16	26.99	36.0	12.0	46.3	23.0	18
DCO 8-G8	1/2	12.7	1/2	10.4	12.0	31.5	1-1/4	31.75	41.0	14.0	51.3	23.0	22
DCO 8-G12	1/2	12.7	3/4	10.4	16.0	40.5	1-5/8	41.27	44.0	18.0	54.3	23.0	28

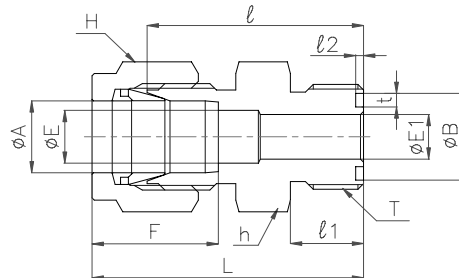
	DCM	O-ring seal Male Connector/ Pipe tapered thread Connects fractional tube to female tapered pipe thread
--	-----	---



H : See dimensional data(Last page)

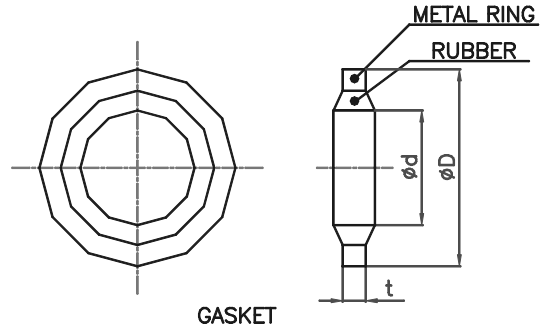
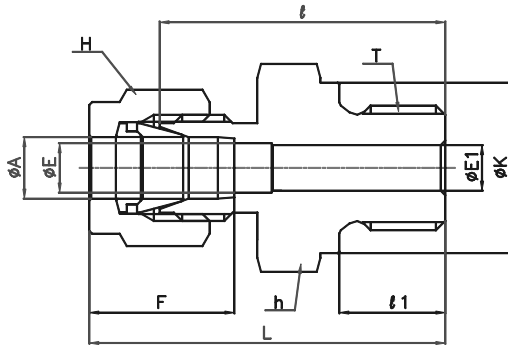
Part No.		A(Tube O. D)		T	E	E <sub>1</sub>	K	h(HEX)		l	l <sub>1</sub>	L	F	O-ring AS568 (NBR)
ANSI NPT	ISO/JIS R	in	mm	NPT/R	mm	mm	mm	in	mm	mm	mm	mm	mm	
DCM 1-4		1/16	1.59	1/4	1.3	4.8	23.6	15/16	23.81	28.3	9.7	32.3	8.9	-113
DCM 2-2	DCM 2-R4	1/8	3.18	1/8	2.3	4.8	18.9	3/4	19.05	26.2	7.1	32.9	13.0	-111
		1/8	3.18	1/4	2.3	4.8	23.6	15/16	23.81	29.9	9.7	36.6	13.0	-113
DCM 4-2 DCM 4-4	DCM 4-R4	1/4	6.35	1/8	4.8	4.8	18.9	3/4	19.05	27.9	7.1	35.4	15.4	-111
		1/4	6.35	1/4	4.8	4.8	23.6	15/16	23.81	31.2	9.7	38.7	15.4	-113
		1/4	6.35	1/4	4.8	4.8	23.6	15/16	23.81	31.6	9.7	39.1	15.4	-113
DCM 6-2 DCM 6-4		3/8	9.53	1/8	7.1	4.8	18.9	3/4	19.05	29.9	7.1	37.4	17.0	-111
	3/8	9.53	1/4	7.1	4.8	23.6	15/16	23.81	32.8	9.7	40.3	17.0	-113	

	DCF	O-ring seal Male Connector/ straight thread Connects fractional tube to UNF straight thread
--	-----	--



H : See dimensional data(Last page)

Part No.	A(Tube O. D)		T	E	E <sub>1</sub>	h(HEX)	l	l <sub>1</sub>	l <sub>2</sub>	L	F	B	t	O-ring AS568
	in	mm	UNF	mm	mm	in	mm	mm	mm	mm	mm	mm	mm	
DCF 4-4	1/4	6.35	9/16-18	4.8	4.8	3/4	30.2	14.0	1.4	37.7	15.4	11.0	2.4	-011
DCF 6-6	3/8	9.53	11/16-16	7.1	6.6	5/8	32.4	14.0	1.4	39.9	17.0	12.6	2.4	-012
DCF 8-8	1/2	12.7	13/16-16	10.4	9.6	7/8	38.1	19.0	1.4	48.4	23.0	15.8	2.4	-014
DCF 12-12	3/4	19.05	1-3/16-12	15.8	15.8	1-3/8	41.0	19.0	1.4	51.3	24.6	22.2	2.4	-018
DCF 16-16	1	25.4	1-7/16-12	22.5	20.6	1-5/8	50.0	24.0	1.4	52.6	31.6	26.9	2.4	-021

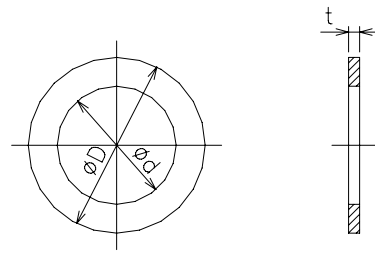
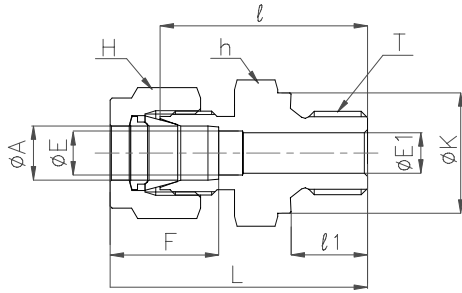
**DCQ****Bonded seal Male Connector/ straight thread**  
**Connects fractional tube to ISO straight thread**

Part No.	T	D	d	t
KP-C-01	G1/8	17	9.9	2
KP-C-02	G1/4	20.5	13.3	2
KP-C-03	G3/8	24	16.8	2
KP-C-04	G1/2	29	21.1	2

H : See dimensional data(Last page)

Part No.	A(Tube O. D)		T	E	E <sub>1</sub>	K	h(HEX)		$\ell$	$\ell_1$	L	F
	in	mm	G	mm	mm	mm	in	mm	mm	mm	mm	mm
DCQ 2-G2	1/8	3.18	1/8	2.3	2.3	13.8	9/16	14.29	23.4	7.1	30.1	13.0
DCQ 2-G4	1/8	3.18	1/4	2.3	2.3	18.0	3/4	19.05	27.8	11.2	34.5	13.0
DCQ 4-G2	1/4	6.35	1/8	4.8	4.1	13.8	9/16	14.29	24.9	7.1	32.4	15.4
DCQ 4-G4	1/4	6.35	1/4	4.8	4.8	18.0	3/4	19.05	30.2	11.2	37.7	15.4
DCQ 4-G6	1/4	6.35	3/8	4.8	4.8	21.8	7/8	22.23	31.5	11.2	39.0	15.4
DCQ 6-G4	3/8	9.53	1/4	7.1	5.9	18.0	3/4	19.05	31.8	11.2	39.3	17.0
DCQ 6-G6	3/8	9.53	3/8	7.1	7.1	21.8	7/8	22.23	33.0	11.2	40.5	17.0
DCQ 6-G8	3/8	9.53	1/2	7.1	7.1	26.0	1-1/16	26.99	38.9	14.2	46.4	17.0
DCQ 8-G4	1/2	12.7	1/4	10.4	5.9	18.0	13/16	20.64	32.5	11.2	42.8	23.0
DCQ 8-G6	1/2	12.7	3/8	10.4	7.9	21.8	7/8	22.23	33.0	11.2	43.3	23.0
DCQ 8-G8	1/2	12.7	1/2	10.4	10.4	26.0	1-1/16	26.99	38.9	14.2	49.2	23.0

	DCJ	Cu Gasket seal Male Connector/ straight thread Connects fractional tube to ISO straight thread
--	-----	---



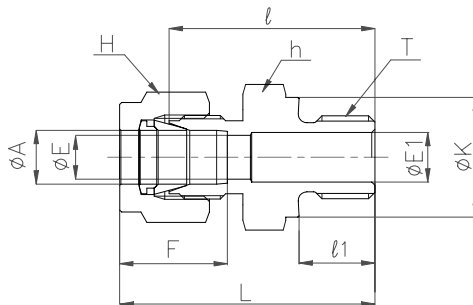
**Gasket** Material : Copper

Part No.	T	D	d	t
KP-A-01	G1/8	18	10	2
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

H : See dimensional data(Last page)

Part No.	A (Tube O. D)		T	E	E <sub>1</sub>	K	h (HEX)		ℓ	ℓ <sub>1</sub>	L	F	Gasket
	in	mm	G	mm	mm	mm	in	mm	mm	mm	mm	mm	
DCJ 2-G2	1/8	3.18	1/8	2.3	4.1	13.8	9/16	14.29	23.4	7.1	30.1	13.0	KP-A-01
DCJ 2-G4	1/8	3.18	1/4	2.3	5.9	18.0	3/4	19.05	27.8	11.2	34.5	13.0	KP-A-03
DCJ 4-G2	1/4	6.35	1/8	4.8	4.1	13.8	9/16	14.29	24.9	7.1	32.4	15.4	KP-A-01
DCJ 4-G4	1/4	6.35	1/4	4.8	5.9	18.0	3/4	19.05	30.2	11.2	37.7	15.4	KP-A-03
DCJ 4-G6	1/4	6.35	3/8	4.8	7.9	21.8	7/8	22.23	31.5	11.2	39.0	15.4	KP-A-05
DCJ 6-G4	3/8	9.53	1/4	7.1	5.9	18.0	3/4	19.05	31.8	11.2	39.3	17.0	KP-A-03
DCJ 6-G6	3/8	9.53	3/8	7.1	7.9	21.8	7/8	22.23	33.0	11.2	40.5	17.0	KP-A-05
DCJ 6-G8	3/8	9.53	1/2	7.1	11.9	26.0	1-1/16	26.99	38.9	14.2	46.4	17.0	KP-A-07
DCJ 8-G4	1/2	12.7	1/4	10.4	5.9	18.0	13/16	20.64	31.8	11.2	42.1	23.0	KP-A-03
DCJ 8-G6	1/2	12.7	3/8	10.4	7.9	21.8	7/8	22.23	33.0	11.2	43.3	23.0	KP-A-05
DCJ 8-G8	1/2	12.7	1/2	10.4	11.9	26.0	1-1/16	26.99	38.9	14.2	49.2	23.0	KP-A-07
DCJ 12-G4	3/4	19.05	1/4	15.8	5.9	18.0	1-1/16	26.99	34.9	11.2	45.2	24.6	KP-A-03
DCJ 12-G6	3/4	19.05	3/8	15.8	7.9	21.8	1-1/16	26.99	35.4	11.2	45.7	24.6	KP-A-05
DCJ 12-G8	3/4	19.05	1/2	15.8	11.9	26.0	1-1/16	26.99	38.9	14.2	49.2	24.6	KP-A-07

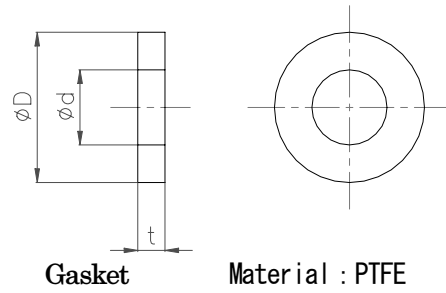
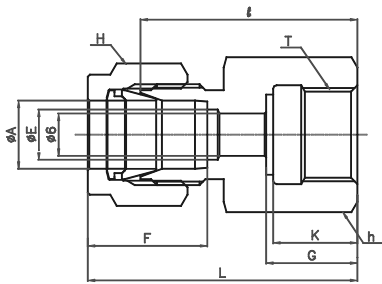
	DCG	Cu Gasket seal Male Connector/ straight thread Connects fractional tube to ISO straight thread
--	-----	---



H : See dimensional data(Last page)

Part No.	A (Tube O. D)		T	E	E <sub>1</sub>	K	h (HEX)		ℓ	ℓ <sub>1</sub>	L	F	Gasket
	in	mm	G	mm	mm	mm	in	mm	mm	mm	mm	mm	
DCG 4-G4	1/4	6.35	1/4	4.8	5.9	18.0	3/4	19.05	30.2	11.2	37.7	15.4	KP-A-03
DCG 6-G6	3/8	9.53	3/8	7.1	7.9	21.8	7/8	22.23	33.0	11.2	40.5	17.0	KP-A-05

	DGA	Gauge Connector Connects fractional tube to ISO parallel thread
--	-----	--

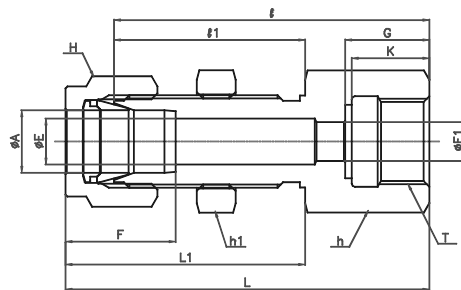


Part No.	T	D	d	t
KP-F-01	G1/4	11	5.5	2
KP-F-02	G3/8	14	5.5	2
KP-F-03	G1/2	18	5.5	2

H : See dimensional data(Last page)

Part No.	A(Tube O. D)		T	E	h(HEX)		ℓ	L	G	F	K
	in	mm	G	mm	in	mm	mm	mm	mm	mm	mm
DGA 2-G2	1/8	3.18	1/8	2.3	9/16	14.29	28.7	35.4	13.0	12.0	12.0
DGA 2-G4	1/8	3.18	1/4	2.3	3/4	19.05	30.7	37.4	13.0	14.0	12.0
DGA 4-G2	1/4	6.35	1/8	4.8	9/16	14.29	30.3	37.8	13.0	12.0	12.0
DGA 4-G4	1/4	6.35	1/4	4.8	3/4	19.05	32.1	39.6	13.0	14.0	12.0
DGA 4-G6	1/4	6.35	3/8	4.8	7/8	22.23	34.1	41.6	15.0	16.0	14.0
DGA 4-G8	1/4	6.35	1/2	4.8	1-1/16	26.99	36.1	43.6	17.0	18.0	16.0
DGA 6-G2	3/8	9.53	1/8	7.1	5/8	15.88	29.0	36.5	13.0	12.0	12.0
DGA 6-G4	3/8	9.53	1/4	7.1	3/4	19.05	30.9	38.4	13.0	14.0	12.0
DGA 6-G6	3/8	9.53	3/8	7.1	7/8	22.23	32.7	40.2	15.0	16.0	14.0
DGA 6-G8	3/8	9.53	1/2	7.1	1-1/16	26.99	34.7	42.2	17.0	18.0	16.0
DGA 8-G4	1/2	12.7	1/4	10.4	13/16	20.64	31.9	42.2	13.0	14.0	12.0
DGA 8-G6	1/2	12.7	3/8	10.4	7/8	22.23	33.7	44.0	15.0	16.0	14.0
DGA 8-G8	1/2	12.7	1/2	10.4	1-1/16	26.99	35.7	46.0	17.0	18.0	16.0
DGA 12-G4	3/4	19.05	1/4	12.7	1-1/16	26.99	34.7	45.0	13.0	14.0	12.0
DGA 12-G6	3/4	19.05	3/8	12.7	1-1/16	26.99	36.7	47.0	15.0	16.0	14.0
DGA 12-G8	3/4	19.05	1/2	12.7	1-1/16	26.99	38.7	49.0	17.0	18.0	16.0

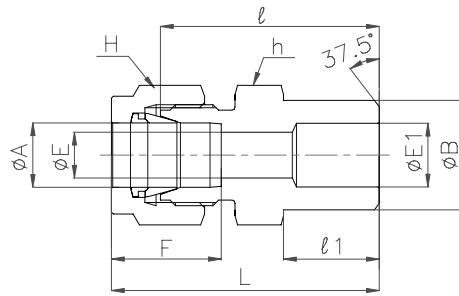
	DGB	Bulkhead Gauge Connector Connects fractional tube to ISO parallel thread
--	-----	---



H : See dimensional data(Last page)

Part No.	A(Tube O. D)		T	E	E <sub>1</sub>	h(HEX)	h <sub>1</sub> (HEX)	L	ℓ	L <sub>1</sub>	ℓ <sub>1</sub>	G	F	Panel	K	
	in	mm	G	mm	mm	in	in	mm	mm	mm	mm	mm	mm	Hole Thic	mm	
DGB 6-G6	3/8	9.53	3/8	7.1	6.0	7/8	3/4	58.0	50.5	37.0	29.5	15.0	17.0	14.7	11.2	14.0

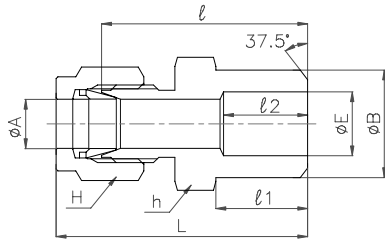
	DCB	Male pipe weld Connector Connects fractional tube to pipe
--	-----	--



H : See dimensional data(Last page)

Part No.	A(Tube O. D)		B (Pipe size)		E	E <sub>1</sub>	h(HEX)		L	l	l <sub>1</sub>	F
	in	mm	Nom.	mm	mm	mm	in	mm	mm	mm	mm	mm
DCB 2-2	1/8	3.18	1/8	10.3	2.3	5.5	7/16	11.11	29.8	23.1	9.7	13.0
DCB 3-2	3/16	4.76	1/8	10.3	3.0	5.5	7/16	11.11	31.1	24.4	9.7	13.8
DCB 4-2	1/4	6.35	1/8	10.3	4.8	5.5	1/2	12.7	33.2	25.7	9.7	15.4
DCB 4-4	1/4	6.35	1/4	13.7	4.8	7.7	9/16	14.29	37.8	30.3	14.2	15.4
DCB 4-6	1/4	6.35	3/8	17.0	4.8	10.4	11/16	17.46	38.7	31.2	14.2	15.4
DCB 4-8	1/4	6.35	1/2	21.3	4.8	13.9	7/8	22.23	44.2	36.7	19.1	15.4
DCB 6-4	3/8	9.53	1/4	13.7	7.1	7.7	5/8	15.88	40.0	32.5	14.2	17.0
DCB 6-6	3/8	9.53	3/8	17.0	7.1	10.4	11/16	17.46	40.0	32.5	14.2	17.0
DCB 6-8	3/8	9.53	1/2	21.3	7.1	13.9	7/8	22.23	45.6	38.1	19.1	17.0
DCB 8-4	1/2	12.7	1/4	13.7	10.4	7.7	13/16	20.64	43.6	33.3	14.2	23.0
DCB 8-6	1/2	12.7	3/8	17.0	10.4	10.4	13/16	20.64	43.6	33.3	14.2	23.0
DCB 8-8	1/2	12.7	1/2	21.3	10.4	13.9	7/8	22.23	48.4	38.1	19.1	23.0
DCB 8-12	1/2	12.7	3/4	26.5	10.4	18.8	1-1/16	26.99	50.9	40.6	19.1	23.0
DCB 10-8	5/8	15.88	1/2	21.3	12.7	13.9	15/16	23.81	49.2	38.9	19.1	24.6
DCB 12-6	3/4	19.05	3/8	17.0	15.8	10.4	1-1/16	26.99	45.9	35.6	14.2	24.6
DCB 12-8	3/4	19.05	1/2	21.3	15.8	13.9	1-1/16	26.99	50.8	40.5	19.1	24.6
DCB 12-12	3/4	19.05	3/4	26.5	15.8	18.8	1-1/16	26.99	50.9	40.6	19.1	24.6
DCB 12-16	3/4	19.05	1	33.4	15.8	24.3	1-3/8	34.93	57.9	47.6	23.9	24.6
DCB 16-8	1	25.4	1/2	21.3	22.5	13.9	1-3/8	34.93	57.6	45.0	19.1	31.6
DCB 16-16	1	25.4	1	33.4	22.5	24.3	1-3/8	34.93	62.6	50.0	23.9	31.6

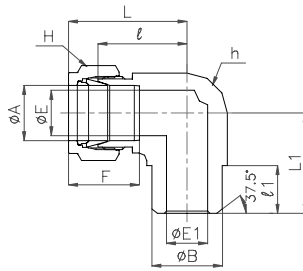
	DCBZ	Male pipe weld Connector/ Bored-through Connects fractional tube to pipe
--	------	---



H : See dimensional data(Last page)

Part No.	A (Tube O. D)		B (Pipe size)		E	h (HEX)		L	l	l <sub>1</sub>	l <sub>2</sub>
	in	mm	Nom.	mm		in	mm				
DCBZ 2-2	1/8	3.18	1/8	10.3	5.5	7/16	11.11	29.8	23.1	9.7	8.0
DCBZ 3-2	3/16	4.76	1/8	10.3	5.5	7/16	11.11	31.1	24.4	9.7	8.0
DCBZ 4-4	1/4	6.35	1/4	13.7	7.7	9/16	14.29	37.8	30.3	14.2	12.0
DCBZ 6-6	3/8	9.53	3/8	17.0	10.4	11/16	17.46	40.0	32.5	14.2	12.0
DCBZ 6-8	3/8	9.53	1/2	21.3	13.9	7/8	22.23	45.6	38.1	19.1	17.0
DCBZ 8-8	1/2	12.7	1/2	21.3	13.9	7/8	22.23	48.4	38.1	19.1	17.0

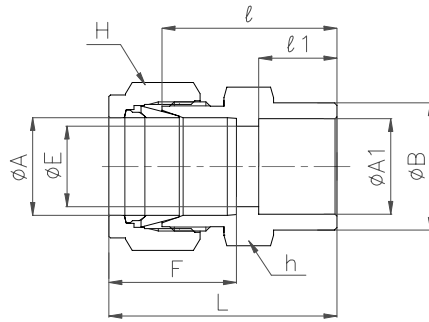
	DLB	Male pipe weld Elbow Connects fractional tube to pipe
--	-----	--



H : See dimensional data(Last page)

Part No.	A (Tube O. D)		B (Pipe size)		E	E <sub>1</sub>	h (Flat)		L	L <sub>1</sub>	l	l <sub>1</sub>	F
	in	mm	Nom.	mm			in	mm					
DLB 2-2	1/8	3.18	1/8	10.3	2.3	5.5	7/16	11.1	23.5	19.1	16.8	9.7	13.0
DLB 3-2	3/16	4.76	1/8	10.3	3.0	5.5	1/2	12.7	25.7	19.1	19.0	9.7	13.8
DLB 4-2	1/4	6.35	1/8	10.3	4.8	5.5	1/2	12.7	27.3	19.1	19.8	9.7	15.4
DLB 4-4	1/4	6.35	1/4	13.7	4.8	7.7	1/2	12.7	27.5	23.9	19.8	14.2	15.4
DLB 6-4	3/8	9.53	1/4	13.7	7.1	7.7	5/8	15.9	30.6	25.4	23.1	14.2	17.0
DLB 6-6	3/8	9.53	3/8	17.1	7.1	10.4	11/16	17.5	31.5	28.5	24.0	14.2	17.0
DLB 6-8	3/8	9.53	1/2	21.3	7.1	13.9	15/16	23.8	33.7	33.5	26.2	19.1	17.0
DLB 8-6	1/2	12.7	3/8	17.1	10.4	10.4	13/16	20.6	35.3	27.5	25.0	14.2	23.0
DLB 8-8	1/2	12.7	1/2	21.3	10.4	13.9	15/16	23.8	36.5	33.5	26.2	19.1	23.0
DLB 12-12	3/4	19.05	3/4	26.5	15.8	18.8	1-1/16	27.0	38.5	35.5	28.2	19.1	24.6
DLB 16-16	1	25.4	1	33.4	22.5	24.3	1-5/16	33.3	45.9	46.7	33.3	26.7	31.6

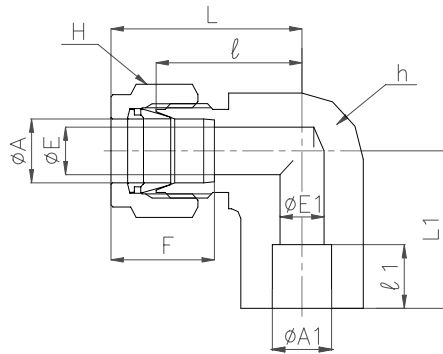
	DCW	Tube socket weld union Connects fractional tubes
--	-----	---



H : See dimensional data(Last page)

Part No.	A Tube OD		A <sub>1</sub> Tube OD		E	B	h (HEX)		L	l	l <sub>1</sub>	F
	in	mm	in	mm	mm	mm	in	mm	mm	mm	mm	mm
DCW 2-2	1/8	3.18	1/8	3.18	2.3	7.9	7/16	11.11	29.1	22.4	6.4	13.0
DCW 4-4	1/4	6.35	1/4	6.35	4.8	11.2	1/2	12.7	33.7	26.2	7.9	15.4
DCW 4-6	1/4	6.35	3/8	9.53	4.8	15.4	5/8	15.88	36.0	28.5	9.7	15.4
DCW 5-5	5/16	7.93	5/16	7.93	6.4	13.0	9/16	14.29	35.0	27.5	9.0	16.3
DCW 6-6	3/8	9.53	3/8	9.53	7.1	15.7	5/8	15.88	37.7	30.2	9.7	17.0
DCW 6-8	3/8	9.53	1/2	12.7	7.1	19.1	13/16	20.64	38.5	31.0	12.7	17.0
DCW 8-8	1/2	12.7	1/2	12.7	10.4	19.1	13/16	20.64	41.3	31.0	12.7	23.0
DCW 8-12	1/2	12.7	3/4	19.05	10.4	26.7	1-1/16	26.99	43.6	33.3	14.2	23.0
DCW 10-10	5/8	15.88	5/8	15.88	12.7	23.2	15/16	23.81	42.1	31.8	14.2	24.6
DCW 12-12	3/4	19.05	3/4	19.05	15.8	26.7	1-1/16	26.99	43.6	33.3	14.2	24.6
DCW 16-16	1	25.4	1	25.4	22.5	33.3	1-3/8	34.93	53.1	40.5	19.1	31.6

	DLW	Tube socket weld Elbow Connects fractional tubes
--	-----	---



H : See dimensional data(Last page)

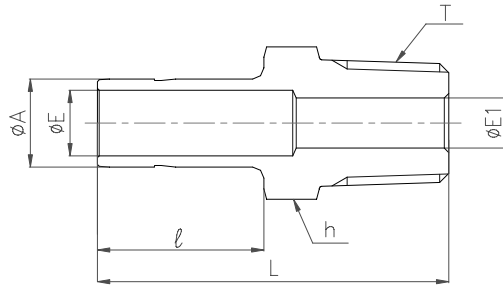
Part No.	A (Tube O. D)		A <sub>1</sub> (Tube O. D)		E	E <sub>1</sub>	h (Flat)		l	l <sub>1</sub>	L	L <sub>1</sub>	F
	in	mm	in	mm	mm	mm	in	mm	mm	mm	mm	mm	mm
DLW 2-2	1/8	3.18	1/8	3.18	2.3	2.3	3/8	9.5	15.8	6.4	22.5	15.8	13.0
DLW 3-3	3/16	4.76	3/16	4.76	3.0	3.0	1/2	12.7	19.0	7.1	25.7	19.0	13.8
DLW 4-4	1/4	6.35	1/4	6.35	4.8	4.8	1/2	12.7	19.8	7.9	27.3	19.8	15.4
DLW 6-4	3/8	9.53	1/4	6.35	7.1	4.8	5/8	15.9	23.0	7.9	30.5	23.0	17.0
DLW 6-6	3/8	9.53	3/8	9.53	7.1	7.1	5/8	15.9	23.1	9.7	30.6	23.1	17.0
DLW 8-8	1/2	12.7	1/2	12.7	10.4	10.4	13/16	20.6	25.0	12.7	35.3	25.0	23.0
DLW 10-10	5/8	15.88	5/8	15.88	12.7	12.7	15/16	23.8	27.0	14.2	37.3	27.0	24.6
DLW 12-12	3/4	19.05	3/4	19.05	15.8	15.8	1-1/16	27.0	28.2	14.2	38.5	28.2	24.6
DLW 16-16	1	25.4	1	25.4	22.5	22.5	1-5/16	33.3	33.3	19.1	45.9	33.3	31.6



# DHA

## Male Adapter

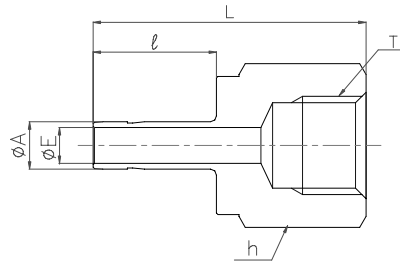
Connects fractional BI-LOK port to female tapered pipe thread



Part No.		A (Tube O. D)		T	E	E <sub>1</sub>	h (HEX)		ℓ	L
ANSI NPT	ISO/JIS R	in	mm	NPT/R	mm	mm	in	mm	mm	mm
DHA 2-1		1/8	3.18	1/16	1.8	3.0	7/16	11.11	14.0	26.9
DHA 2-2	DHA 2-R2	1/8	3.18	1/8	1.8	4.6	7/16	11.11	14.0	28.4
DHA 2-4	DHA 2-R4	1/8	3.18	1/4	1.8	7.1	9/16	14.29	14.0	33.5
DHA 3-2	DHA 3-R2	3/16	4.76	1/8	3.0	4.6	7/16	11.11	14.8	29.2
DHA 3-4	DHA 3-R4	3/16	4.76	1/4	3.0	7.1	9/16	14.29	14.8	34.0
DHA 4-2	DHA 4-R2	1/4	6.35	1/8	4.6	4.6	7/16	11.11	16.5	31.0
DHA 4-4	DHA 4-R4	1/4	6.35	1/4	4.6	7.1	9/16	14.29	16.5	35.5
DHA 4-6		1/4	6.35	3/8	4.6	10.4	11/16	17.46	16.5	36.5
	DHA 4-R6	1/4	6.35	3/8	4.6	10.4	11/16	17.46	16.5	37.5
DHA 4-8	DHA 4-R8	1/4	6.35	1/2	4.6	12.7	7/8	22.23	16.5	42.0
DHA 5-2	DHA 5-R2	5/16	7.94	1/8	6.4	4.6	7/16	11.11	17.2	31.8
DHA 5-4	DHA 5-R4	5/16	7.94	1/4	6.4	7.1	9/16	14.29	17.2	37.1
DHA 6-2	DHA 6-R2	3/8	9.53	1/8	7.1	4.6	7/16	11.11	18.0	33.3
DHA 6-4	DHA 6-R4	3/8	9.53	1/4	7.1	7.1	9/16	14.29	18.0	38.0
DHA 6-6		3/8	9.53	3/8	7.1	10.4	11/16	17.46	18.0	38.0
	DHA 6-R6	3/8	9.53	3/8	7.1	10.4	11/16	17.46	18.0	39.0
DHA 6-8	DHA 6-R8	3/8	9.53	1/2	7.1	12.7	7/8	22.23	18.0	43.5
DHA 8-2		1/2	12.7	1/8	9.9	4.6	9/16	14.29	23.5	39.6
	DHA 8-R2	1/2	12.7	1/8	9.9	4.6	9/16	14.29	23.5	40.0
DHA 8-4	DHA 8-R4	1/2	12.7	1/4	9.9	7.1	9/16	14.29	23.5	43.5
DHA 8-6		1/2	12.7	3/8	9.9	10.4	11/16	17.46	23.5	44.5
	DHA 8-R6	1/2	12.7	3/8	9.9	10.4	11/16	17.46	23.5	45.5
DHA 8-8	DHA 8-R8	1/2	12.7	1/2	9.9	12.7	7/8	22.23	23.5	49.0
DHA 8-12		1/2	12.7	3/4	9.9	18.3	1-1/16	26.99	23.5	49.9
	DHA 8-R12	1/2	12.7	3/4	9.9	18.3	1-1/16	26.99	23.5	51.9
DHA 10-6		5/8	15.88	3/8	12.7	10.4	11/16	17.46	25.2	46.0
	DHA 10-R6	5/8	15.88	3/8	12.7	10.4	11/16	17.46	25.2	47.0
DHA 10-8	DHA 10-R8	5/8	15.88	1/2	12.7	12.7	7/8	22.23	25.2	50.8
DHA 10-12		5/8	15.88	3/4	12.7	18.3	1-1/16	26.99	25.2	51.6
	DHA 10-R12	5/8	15.88	3/4	12.7	18.3	1-1/16	26.99	25.2	53.6
DHA 12-6	DHA 12-R4	3/4	19.05	1/4	15.0	7.1	7/8	22.23	25.2	46.0
	DHA 12-R6	3/4	19.05	3/8	15.0	10.4	7/8	22.23	25.2	45.7
DHA 12-8	DHA 12-R8	3/4	19.05	3/8	15.0	10.4	7/8	22.23	25.2	47.7
DHA 12-12		3/4	19.05	1/2	15.0	12.7	7/8	22.23	25.2	50.7
	DHA 12-R12	3/4	19.05	3/4	15.0	18.3	1-1/16	26.99	25.2	51.6
DHA 12-16	DHA 12-R16	3/4	19.05	3/4	15.0	18.3	1-1/16	26.99	25.2	53.6
	DHA 12-R16	3/4	19.05	1	15.0	22.5	1-3/8	34.93	25.2	57.9
DHA 14-12		7/8	22.23	3/4	17.3	18.3	1-1/16	26.99	27.0	53.1
	DHA 14-R12	7/8	22.23	3/4	17.3	18.3	1-1/16	26.99	27.0	55.1
DHA 16-12		1	25.4	3/4	20.1	18.3	1-1/16	26.99	32.5	58.0
	DHA 16-R12	1	25.4	3/4	20.1	18.3	1-1/16	26.99	32.5	60.0
DHA 16-16	DHA 16-R16	1	25.4	1	20.1	22.5	1-3/8	34.93	32.5	65.0

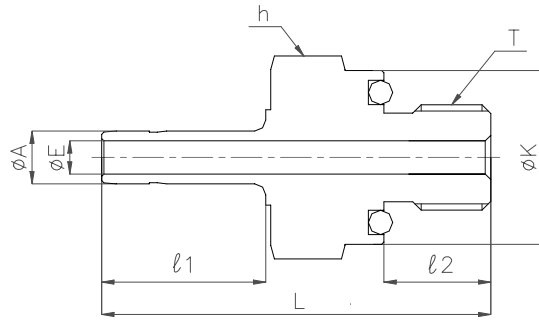
# DHC

Female Adapter  
Connects fractional BI-LOK port to male tapered pipe thread



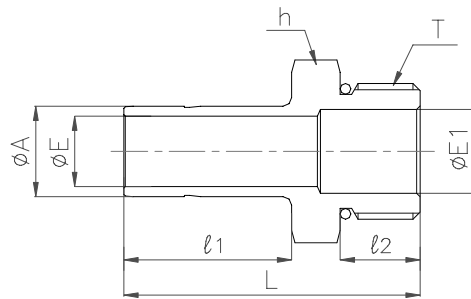
Part No.		A (Tube O. D)		T	E	h (HEX)		ℓ	L	
ANSI NPT	ISO/JIS R <sub>c</sub>	in	mm	NPT/ R <sub>c</sub>	mm	in	mm	mm	mm	
DHC 2-2	DHC 2-R2	1/8	3.18	1/8	1.8	9/16	14.29	14.0	31.0	
DHC 2-4	DHC 2-R4	1/8	3.18	1/4	1.8	3/4	19.05	14.0	34.0	
DHC 3-2	DHC 3-R2	3/16	4.76	1/8	3.2	9/16	14.29	14.8	32.1	
DHC 3-4	DHC 3-R4	3/16	4.76	1/4	3.2	3/4	19.05	14.8	34.8	
DHC 4-2	DHC 4-R2	1/4	6.35	1/8	4.6	9/16	14.29	16.5	33.5	
DHC 4-4	DHC 4-R4	1/4	6.35	1/4	4.6	3/4	19.05	16.5	36.5	
DHC 4-6	DHC 4-R6	1/4	6.35	3/8	4.6	7/8	22.23	16.5	39.5	
DHC 4-8	DHC 4-R8	1/4	6.35	1/2	4.6	1-1/16	26.99	16.5	45.2	
DHC 5-2	DHC 5-R2	5/16	7.94	1/8	6.4	9/16	14.29	17.2	34.3	
DHC 5-4	DHC 5-R4	5/16	7.94	1/4	6.4	3/4	19.05	17.2	37.1	
DHC 6-2	DHC 6-R2	3/8	9.53	1/8	7.1	9/16	14.29	18.0	35.3	
DHC 6-4	DHC 6-R4	3/8	9.53	1/4	7.1	3/4	19.05	18.0	38.0	
DHC 6-6	DHC 6-R6	3/8	9.53	3/8	7.1	7/8	22.23	18.0	41.0	
DHC 6-8	DHC 6-R8	3/8	9.53	1/2	7.1	1-1/16	26.99	18.0	46.5	
DHC 8-4	DHC 8-R2	1/2	12.7	1/8	9.9	9/16	14.29	23.5	40.5	
	DHC 8-R4	1/2	12.7	1/4	9.9	3/4	19.05	23.5	43.5	
	DHC 8-6	DHC 8-R6	1/2	12.7	3/8	9.9	7/8	22.23	23.5	47.0
	DHC 8-8	DHC 8-R8	1/2	12.7	1/2	9.9	1-1/16	26.99	23.5	52.5
	DHC 8-R12	1/2	12.7	3/4	9.9	1-5/16	33.34	23.5	54.0	
DHC 10-6	DHC 10-R6	5/8	15.88	3/8	12.7	7/8	22.23	25.2	48.3	
DHC 10-8	DHC 10-R8	5/8	15.88	1/2	12.7	1-1/16	26.99	25.2	53.8	
DHC 10-12	DHC 10-R12	5/8	15.88	3/4	12.7	1-5/16	33.34	25.2	55.4	
DHC 12-8	DHC 12-R8	3/4	19.05	1/2	15.0	1-1/16	26.99	25.2	54.0	
DHC 12-12	DHC 12-R12	3/4	19.05	3/4	15.0	1-5/16	33.34	25.2	55.4	
DHC 12-16	DHC 12-R16	3/4	19.05	1	15.0	1-5/8	41.28	25.2	62.5	
DHC 14-12	DHC 14-R12	7/8	22.23	3/4	17.3	1-5/16	33.34	27.0	57.2	
DHC 16-12	DHC 16-R8	1	25.4	1/2	20.1	1-1/16	26.99	32.5	61.0	
	DHC 16-R12	1	25.4	3/4	20.1	1-5/16	33.34	32.5	62.0	
	DHC 16-R16	1	25.4	1	20.1	1-5/8	41.28	32.5	68.8	

	DHO	<b>O-ring seal Male Adapter / Straight thread</b> Connects fractional BI-LOK port to female UNF straight thread
--	-----	--



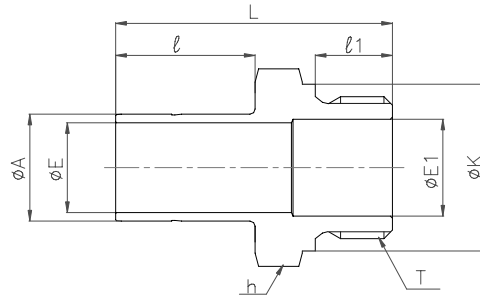
Part No.	A (Tube O. D)		T	E	h (HEX)		l <sub>1</sub>	l <sub>2</sub>	L	K	O-ring AS568 (NBR)
	in	mm	UNF	mm	in	mm	mm	mm	mm	mm	
DHO 2-2	1/8	3.18	5/16-24	1.8	9/16	14.29	14.0	8.6	32.5	14.0	-011
DHO 3-3	3/16	4.76	3/8-24	3.2	5/8	15.88	14.8	9.7	35.1	15.4	-012
DHO 4-4	1/4	6.35	7/16-20	4.6	3/4	19.05	16.5	10.4	39.1	18.5	-111
DHO 5-5	5/16	7.94	1/2-20	6.4	7/8	22.23	17.2	11.2	41.7	21.8	-112
DHO 6-6	3/8	9.53	9/16-18	7.1	15/16	23.81	18.0	11.9	43.2	23.6	-113
DHO 8-8	1/2	12.7	3/4-16	9.9	1-1/8	28.58	23.5	11.9	49.5	28.0	-116

	DHB	<b>O-ring seal Male Adapter / Straight thread</b> Connects fractional BI-LOK port to female UNF straight thread
--	-----	--



Part No.	A (Tube O. D)		T	E	E <sub>1</sub>	h (HEX)		l <sub>1</sub>	l <sub>2</sub>	L	O-ring AS568 (NBR)
	in	mm	UNF	mm	mm	in	mm	mm	mm	mm	
DHB 2-2	1/8	3.18	5/16-24	1.8	2.3	7/16	11.11	14.0	7.5	27.0	-902
DHB 4-4	1/4	6.35	7/16-20	4.6	4.6	9/16	14.29	16.5	9.0	33.0	-904
DHB 6-4	3/8	9.53	7/16-20	7.1	4.6	9/16	14.29	18.0	9.0	34.5	-904
DHB 6-6	3/8	9.53	9/16-18	7.1	7.1	11/16	17.46	18.0	10.0	34.7	-906
DHB 6-8	3/8	9.53	3/4-16	7.1	9.9	7/8	22.23	18.0	11.0	36.0	-908
DHB 8-6	1/2	12.7	9/16-18	9.9	9.9	11/16	17.46	23.5	10.0	40.0	-906
DHB 8-8	1/2	12.7	3/4-16	9.9	9.9	7/8	22.23	23.5	11.0	41.5	-908

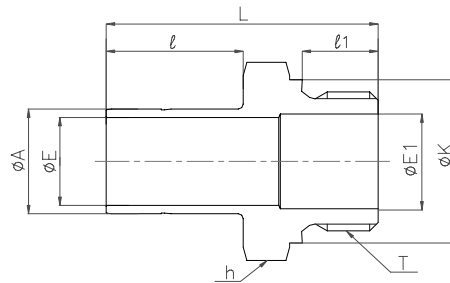
	DHQ	Bonded seal Male Adapter / Straight thread Connects fractional BI-LOK port to female ISO straight thread
--	-----	---



Part No.	A (Tube O. D.)		T	E	E <sub>1</sub>	h (HEX)		l	l <sub>1</sub>	L	K
	in	mm				in	mm				
DHQ 4-G2	1/4	6.35	1/8	4.6	4.1	9/16	14.29	16.5	7.1	33.3	13.8
DHQ 4-G4	1/4	6.35	1/4	4.6	5.9	3/4	19.05	16.5	11.2	38.1	18.0
DHQ 6-G4	3/8	9.53	1/4	7.1	5.9	3/4	19.05	18.0	11.2	39.9	18.0
DHQ 6-G6	3/8	9.53	3/8	7.1	7.1	7/8	22.23	18.0	11.2	40.6	21.8
DHQ 8-G4	1/2	12.7	1/4	9.9	5.9	3/4	19.05	23.5	11.2	45.5	18.0
DHQ 8-G6	1/2	12.7	3/8	9.9	7.9	7/8	22.23	23.5	11.2	46.2	21.8
DHQ 8-G8	1/2	12.7	1/2	9.9	9.9	1-1/16	26.99	23.5	14.2	49.3	26.0

Note: Gasket dimension for bonded seal is shown in **DCQ** on page 34.

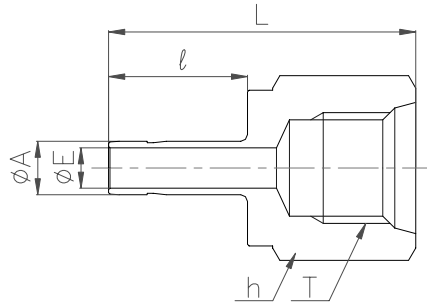
	DHJ	Cu Gasket seal Male Adapter / Straight thread Connects fractional BI-LOK port to female ISO straight thread
--	-----	--



Part No.	A (Tube O. D.)		T	E	E <sub>1</sub>	h (HEX)		l	l <sub>1</sub>	L	K
	in	mm				in	mm				
DHJ 4-G2	1/4	6.35	1/8	4.6	4.1	9/16	14.29	16.5	7.1	33.3	13.8
DHJ 4-G4	1/4	6.35	1/4	4.6	5.9	3/4	19.05	16.5	11.2	36.4	18.0
DHJ 4-G6	1/4	6.35	3/8	4.6	4.6	7/8	22.23	16.5	11.2	38.8	21.8
DHJ 6-G4	3/8	9.53	1/4	7.1	5.9	3/4	19.05	18.0	11.2	39.9	18.0
DHJ 6-G6	3/8	9.53	3/8	7.1	7.9	7/8	22.23	18.0	11.2	39.2	21.8
DHJ 6-G8	3/8	9.53	1/2	7.1	7.1	1-1/16	26.99	18.0	14.2	43.7	26.0
DHJ 8-G4	1/2	12.7	1/4	9.9	5.9	3/4	19.05	23.5	11.2	45.5	18.0
DHJ 8-G6	1/2	12.7	3/8	9.9	7.9	7/8	22.23	23.5	11.2	46.2	21.8
DHJ 8-G8	1/2	12.7	1/2	9.9	9.9	1-1/16	26.99	23.5	14.2	49.3	26.0

Note: Cu Gasket dimension is shown in **DCJ** on page 35

	DHF	<b>Gauge Adapter</b> <b>Connects fractional BI-LOK port to female UNF straight thread</b>
--	-----	--

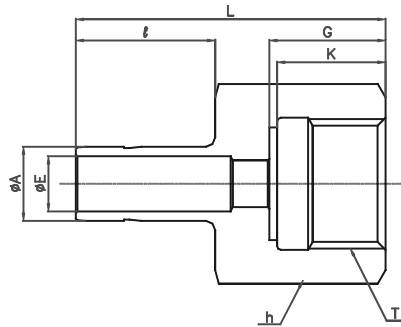


Part No.	A (Tube O. D)		T	E	h (HEX)		ℓ	L	O-ring AS568 (NBR)
	in	mm	UNF	mm	in	mm	mm	mm	
DHF 6-6	3/8	9.53	9/16-18	7.1	7/8	22.23	18.0	40.0	-906
DHF 6-8	3/8	9.53	3/4-16	7.1	1-1/16	26.99	18.0	44.0	-908
DHF 8-6	1/2	12.7	9/16-18	9.9	7/8	22.23	23.5	45.0	-906
DHF 8-8	1/2	12.7	3/4-16	9.9	1-1/16	26.99	23.5	48.0	-908

	DHF	<b>Gauge Adapter</b> <b>Connects fractional BI-LOK port to female ISO/straight thread</b>
--	-----	--

Part No.	A (Tube O. D)		T	E	h (HEX)		ℓ	L	O-ring JIS B 2401
	in	mm	G	mm	in	mm	mm	mm	
DHF 4-G4	1/4	6.35	1/4	4.6	3/4	19.05	16.5	36.5	IB-P11
DHF 4-G6	1/4	6.35	3/8	4.6	7/8	22.23	16.5	39.5	14

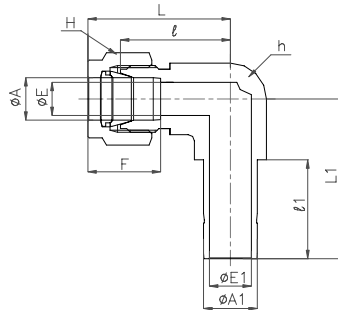
	DHG	<b>Gauge Adapter</b> <b>Connects fractional BI-LOK port to female ISO/G straight thread</b>
--	-----	--



Part No.	A (Tube O/D)		T	E	E <sub>1</sub>	h (HEX)		ℓ	G	L	K
	in	mm	G	mm	mm	in	mm	mm	mm	mm	mm
DHG 4-G4	1/4	6.35	1/4	4.6	6.0	3/4	19.05	16.5	15.0	38.0	14.0
DHG 4-G6	1/4	6.35	3/8	4.6	6.0	7/8	22.23	16.5	15.0	40.0	14.0
DHG 6-G6	3/8	9.53	3/8	7.1	6.0	7/8	22.23	18.0	15.0	40.0	14.0
DHG 8-G8	1/2	12.7	1/2	9.9	6.0	1-1/16	26.99	23.5	17.0	47.5	16.0

Note: Gasket dimension is shown in **DGA** on page 36.

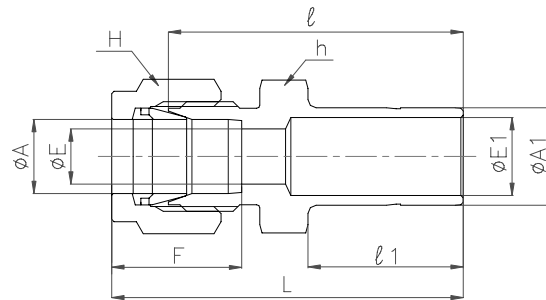
	DLH	Elbow Adapter Connects fractional tubes
--	-----	--



H : See dimensional data(Last page)

Part No.	A(Tube O. D)		A <sub>1</sub> (Tube O. D)		E	E <sub>1</sub>	h(Flat)		l	l <sub>1</sub>	L	L <sub>1</sub>	F
	in	mm	in	mm	mm	mm	in	mm	mm	mm	mm	mm	mm
DLH 4-4	1/4	6.35	1/4	6.35	4.8	4.6	5/8	15.9	19.8	16.5	27.3	26.2	15.4
DLH 5-5	5/16	7.94	5/16	7.94	6.4	6.4	5/8	15.9	22.4	17.2	29.9	26.9	16.3
DLH 6-6	3/8	9.53	3/8	9.53	7.1	7.1	5/8	15.9	23.1	18.0	30.6	27.7	17.0
DLH 8-8	1/2	12.7	1/2	12.7	10.4	9.9	13/16	20.6	26.2	23.5	36.5	39.9	23.0

	DRE	Reducer Connects fractional tube to metric BI-LOK port
--	-----	---



H : See dimensional data(Last page)

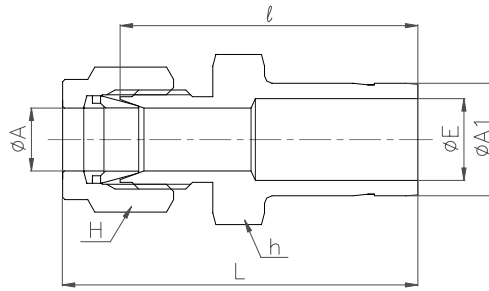
Part No.	A(Tube O. D)		A <sub>1</sub>	E	E <sub>1</sub>	h(HEX)		l	l <sub>1</sub>	L	F
	in	mm	mm	mm	mm	in	mm	mm	mm	mm	mm
DRE 1-6M	1/16	1.59	6	1.3	4.0	7/16	11.11	28.7	16.5	32.7	8.9
DRE 2-6M	1/8	3.18	6	2.3	4.0	7/16	11.11	30.2	16.5	36.9	13.0
DRE 4-3M	1/4	6.35	3	4.8	1.5	1/2	12.7	29.7	14.0	37.2	15.4
DRE 4-6M	1/4	6.35	6	4.8	4.0	1/2	12.7	32.6	16.5	40.1	15.4
DRE 6-6M	3/8	9.53	6	7.1	4.0	5/8	15.88	34.8	16.5	42.3	17.0
DRE 6-10M	3/8	9.53	10	7.1	8.0	5/8	15.88	36.3	18.0	43.8	17.0
DRE 8-12M	1/2	12.7	12	10.4	9.5	13/16	20.64	43.3	23.5	53.6	23.0

**DRE****Reducer  
Connects fractional tube to fractional BI-LOK port**

H : See dimensional data(Last page)

Part No.	A (Tube O. D.)		A <sub>1</sub> (Tube O. D.)		E	E <sub>1</sub>	h (HEX)		ℓ	ℓ <sub>1</sub>	L	F
	in	mm	in	mm	mm	mm	in	mm	mm	mm	mm	mm
DRE 1-2	1/16	1.59	1/8	3.18	1.3	2.0	5/16	7.94	25.4	14.0	29.4	8.9
DRE 1-4	1/16	1.59	1/4	6.35	1.3	4.8	5/16	7.94	27.9	16.5	31.9	8.9
DRE 1-6	1/16	1.59	3/8	9.53	1.3	7.1	7/16	11.11	30.0	18.0	34.0	8.9
DRE 2-2	1/8	3.18	1/8	3.18	2.3	2.0	7/16	11.11	27.0	14.0	33.7	13.0
DRE 2-3	1/8	3.18	3/16	4.76	2.3	3.0	7/16	11.11	27.7	14.8	34.4	13.0
DRE 2-4	1/8	3.18	1/4	6.35	2.3	4.8	7/16	11.11	29.5	16.5	36.2	13.0
DRE 2-5	1/8	3.18	5/16	7.94	2.3	6.4	7/16	11.11	30.2	17.2	36.9	13.0
DRE 2-6	1/8	3.18	3/8	9.53	2.3	7.1	7/16	11.11	31.0	18.0	37.7	13.0
DRE 2-8	1/8	3.18	1/2	12.7	2.3	9.9	9/16	14.29	37.4	23.5	44.1	13.0
DRE 3-4	3/16	4.76	1/4	6.35	3.0	4.8	7/16	11.11	30.5	16.5	37.2	13.8
DRE 3-5	3/16	4.76	5/16	7.94	3.0	6.4	7/16	11.11	31.2	17.2	37.9	13.8
DRE 3-8	3/16	4.76	1/2	12.7	3.0	9.9	9/16	14.29	38.0	23.5	46.8	13.8
DRE 4-2	1/4	6.35	1/8	3.18	4.8	2.0	1/2	12.7	29.5	14.0	37.0	15.4
DRE 4-3	1/4	6.35	3/16	4.76	4.8	3.0	1/2	12.7	30.2	14.8	37.7	15.4
DRE 4-4	1/4	6.35	1/4	6.35	4.8	4.8	1/2	12.7	31.8	16.5	39.3	15.4
DRE 4-5	1/4	6.35	5/16	7.94	4.8	6.4	1/2	12.7	32.5	17.2	40.0	15.4
DRE 4-6	1/4	6.35	3/8	9.53	4.8	7.1	1/2	12.7	33.3	18.0	40.8	15.4
DRE 4-8	1/4	6.35	1/2	12.7	4.8	9.9	9/16	14.29	39.0	23.5	46.5	15.4
DRE 4-10	1/4	6.35	5/8	15.88	4.8	12.7	11/16	17.46	40.7	25.2	48.2	15.4
DRE 4-12	1/4	6.35	3/4	19.05	4.8	15.0	7/8	22.23	43.0	25.2	50.5	15.4
DRE 5-6	5/16	7.94	3/8	9.53	6.4	7.1	9/16	14.29	34.6	18.0	42.1	16.3
DRE 5-8	5/16	7.94	1/2	12.7	6.4	9.9	9/16	14.29	40.1	23.5	47.6	16.3
DRE 6-2	3/8	9.53	1/8	3.18	7.1	2.0	5/8	15.88	31.5	14.0	39.0	17.0
DRE 6-3	3/8	9.53	3/16	4.76	7.1	3.0	5/8	15.88	32.3	14.8	39.8	17.0
DRE 6-4	3/8	9.53	1/4	6.35	7.1	4.8	5/8	15.88	34.0	16.5	41.5	17.0
DRE 6-5	3/8	9.53	5/16	7.94	7.1	6.4	5/8	15.88	34.7	17.2	42.2	17.0
DRE 6-6	3/8	9.53	3/8	9.53	7.1	7.1	5/8	15.88	35.5	18.0	43.0	17.0
DRE 6-8	3/8	9.53	1/2	12.7	7.1	9.9	5/8	15.88	41.0	23.5	48.5	17.0
DRE 6-10	3/8	9.53	5/8	15.88	7.1	12.7	11/16	17.46	42.9	25.2	50.4	17.0
DRE 6-12	3/8	9.53	3/4	19.05	7.1	15.0	13/16	20.64	43.0	25.2	50.5	17.0
DRE 6-14	3/8	9.53	7/8	22.23	7.1	17.3	15/16	23.81	46.0	27.0	53.5	17.0
DRE 8-4	1/2	12.7	1/4	6.35	10.4	4.8	13/16	20.64	35.5	16.5	45.8	23.0
DRE 8-6	1/2	12.7	3/8	9.53	10.4	7.1	13/16	20.64	37.0	18.0	47.3	23.0
DRE 8-8	1/2	12.7	1/2	12.7	10.4	9.9	13/16	20.64	42.5	23.5	52.8	23.0
DRE 8-10	1/2	12.7	5/8	15.88	10.4	12.7	13/16	20.64	43.7	25.2	54.0	23.0
DRE 8-12	1/2	12.7	3/4	19.05	10.4	15.0	13/16	20.64	43.7	25.2	54.0	23.0
DRE 8-16	1/2	12.7	1	25.4	10.4	20.1	1-1/16	26.99	50.0	32.5	60.3	23.0
DRE 10-8	5/8	15.88	1/2	12.7	12.7	9.9	15/16	23.81	43.0	23.5	53.3	24.6
DRE 10-12	5/8	15.88	3/4	19.05	12.7	15.0	15/16	23.81	44.5	25.2	54.8	24.6
DRE 10-14	5/8	15.88	7/8	22.23	12.7	17.3	15/16	23.81	46.0	27.0	56.3	24.6
DRE 10-16	5/8	15.88	1	25.4	12.7	20.1	1-1/16	26.99	51.5	32.5	61.8	24.6
DRE 12-4	3/4	19.05	1/4	6.35	15.8	4.8	1-1/16	26.99	37.9	16.5	48.2	24.6
DRE 12-6	3/4	19.05	3/8	9.53	15.8	7.1	1-1/16	26.99	39.4	18.0	49.7	24.6
DRE 12-8	3/4	19.05	1/2	12.7	15.8	9.9	1-1/16	26.99	45.5	23.5	55.8	24.6
DRE 12-10	3/4	19.05	5/8	15.88	15.8	12.7	1-1/16	26.99	46.0	25.2	56.3	24.6
DRE 12-14	3/4	19.05	7/8	22.23	15.8	17.3	1-1/16	26.99	47.0	27.0	57.3	24.6
DRE 12-16	3/4	19.05	1	25.4	15.8	20.1	1-1/16	26.99	52.5	32.5	62.8	24.6
DRE 14-6	7/8	22.23	3/8	9.53	18.3	7.1	1-3/16	30.16	41.5	18.0	51.7	26.1
DRE 14-12	7/8	22.23	3/4	19.05	18.3	15.0	1-3/16	30.16	48.3	25.2	58.5	26.1
DRE 16-8	1	25.4	1/2	12.7	22.5	9.9	1-3/8	34.93	51.5	23.5	64.1	31.6
DRE 16-12	1	25.4	3/4	19.05	22.5	15.0	1-3/8	34.93	53.2	25.2	65.8	31.6
DRE 16-14	1	25.4	7/8	22.23	22.5	17.3	1-3/8	34.93	53.2	27.0	65.8	31.6

	DREZ	Reducer/ Bored-through Connects fractional tube to fractional BI-LOK port
--	------	--



H : See dimensional data(Last page)

Part No.	A (Tube O. D)		A <sub>1</sub> (Tube O. D)		E	h (HEX)		ℓ	ℓ <sub>1</sub>	L
	in	mm	in	mm		in	mm			
DREZ 1-2	1/16	1.59	1/8	3.18	2.0	5/16	7.94	25.4	14.0	29.4
DREZ 1-4	1/16	1.59	1/4	6.35	4.8	5/16	7.94	27.9	16.5	31.9
DREZ 1-6	1/16	1.59	3/8	9.53	7.1	7/16	11.11	30.0	18.0	34.0
DREZ 2-4	1/8	3.18	1/4	6.35	4.8	7/16	11.11	29.5	16.5	36.2
DREZ 2-6	1/8	3.18	3/8	9.53	7.1	7/16	11.11	31.0	18.0	37.7
DREZ 4-6	1/4	6.35	3/8	9.53	7.1	1/2	12.7	33.3	18.0	40.8
DREZ 4-8	1/4	6.35	1/2	12.7	9.9	9/16	14.29	39.0	23.5	46.5
DREZ 6-10	3/8	9.53	5/8	15.88	12.7	11/16	17.46	42.9	25.2	50.4
DREZ 6-12	3/8	9.53	3/4	19.05	15.0	13/16	20.64	43.0	25.2	50.5

	DREZ	Reducer/ Bored-through Connects fractional tube to Metric BI-LOK port
--	------	--

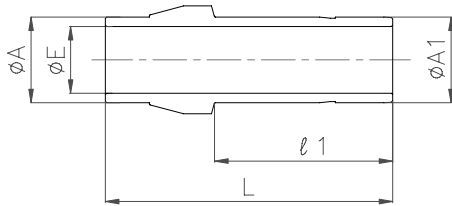
H : See dimensional data(Last page)

Part No.	A (Tube O. D)		A <sub>1</sub> (Tube O. D)	E	h (HEX)		ℓ	ℓ <sub>1</sub>	L
	in	mm			mm	in			
DREZ 1-6M	1/16	1.59	6	4.0	7/16	11.11	28.7	16.5	32.7
DREZ 2-6M	1/8	3.18	6	4.0	7/16	11.11	30.2	16.5	36.9
DREZ 2-10M	1/8	3.18	10	8.0	7/16	11.11	34.2	18.0	41.7

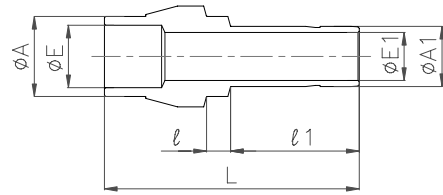




	DPC	Port Connector Connects to fractional BI-LOK Port
--	-----	--



Straight type

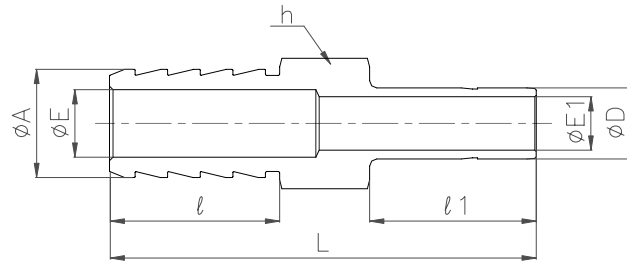


Reducing type

Part No.	A (Tube O. D.)		A <sub>1</sub> (Tube O. D.)		E	E <sub>1</sub>	L	ℓ <sub>1</sub>	ℓ
	in	mm	in	mm	mm	mm	mm	mm	mm
DPC 1-1	1/16	1.59	1/16	1.59	0.6	0.6	15.4	10.0	–
DPC 2-1	1/8	3.18	1/16	1.59	2.1	0.6	21.0	10.0	2.8
DPC 2-2	1/8	3.18	1/8	3.18	2.1	2.1	24.6	16.3	–
DPC 4-1	1/4	6.35	1/16	1.59	4.8	0.6	22.4	10.0	3.6
DPC 4-2	1/4	6.35	1/8	3.18	4.8	2.1	28.7	16.3	3.6
DPC 4-4	1/4	6.35	1/4	6.35	4.8	4.8	27.7	18.8	–
DPC 5-5	5/16	7.94	5/16	7.94	6.3	6.3	28.9	20.0	–
DPC 6-4	3/8	9.53	1/4	6.35	7.6	4.8	31.5	18.8	3.6
DPC 6-6	3/8	9.53	3/8	9.53	7.6	7.6	29.5	20.3	–
DPC 8-4	1/2	12.7	1/4	6.35	9.9	4.8	38.7	18.8	3.8
DPC 8-6	1/2	12.7	3/8	9.53	9.9	7.6	40.2	20.3	3.8
DPC 8-8	1/2	12.7	1/2	12.7	9.9	9.9	42.4	26.2	–
DPC 10-10	5/8	15.88	5/8	15.88	12.7	12.7	45.8	27.7	–
DPC 12-6	3/4	19.05	3/8	9.53	15.0	7.6	42.2	20.3	3.8
DPC 12-8	3/4	19.05	1/2	12.7	15.0	9.9	45.0	23.1	3.8
DPC 12-12	3/4	19.05	3/4	19.05	15.0	15.0	45.8	27.7	–
DPC 16-16	1	25.4	1	25.4	20.1	20.1	58.0	36.0	–

	DPC	Port Connector Connects fractional BI-LOK Port to metric BI-LOK Port
--	-----	---

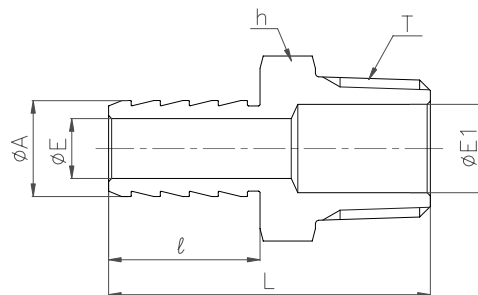
Part No.	A (Tube O. D.)		A <sub>1</sub> (Tube O. D.)	E	E <sub>1</sub>	L	ℓ <sub>1</sub>	ℓ
	in	mm	mm	mm	mm	mm	mm	mm
DPC 4-6M	1/4	6.35	6	4.8	4.0	31.4	19.0	3.6

**DAH****Hose Adapter  
Connects Hose to fractional BI-LOK Port**

Part No.	A (Hose I. D)		D (Tube O. D)		E	$E_1$	h (HEX)		L	$\ell$	$\ell_1$
	in	mm	in	mm	mm	mm	in	mm	mm	mm	mm
DAH 4-4	1/4	7.7	1/4	6.35	4.8	4.6	7/16	11.11	46.5	20.0	16.5
DAH 5-4	5/16	9.5	1/4	6.35	4.8	4.8	7/16	11.11	48.5	22.0	16.5
DAH 6-4	3/8	11.4	1/4	6.35	7.6	4.6	1/2	12.7	49.0	22.0	16.5
DAH 6-6	3/8	11.4	3/8	9.53	7.6	7.1	9/16	14.29	50.5	22.0	18.0
DAH 12-12	3/4	22.9	3/4	19.05	15.0	15.0	1-1/16	26.99	62.0	27.0	25.2

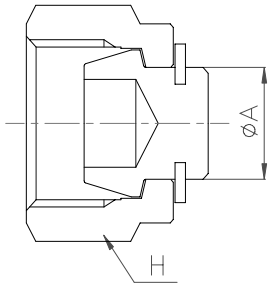
**DAH****Hose Adapter  
Connects Hose to metric BI-LOK Port**

Part No.	A (Hose ID)		D (Tube OD)	E	$E_1$	h (HEX)		L	$\ell$	$\ell_1$
	in	mm	mm	mm	mm	in	mm	mm	mm	mm
DAH 4-6M	1/4	7.7	6	4.8	4.6	7/16	11.11	47.0	20.0	16.5
DAH 4-8M	1/4	7.7	8	4.8	6.4	7/16	11.11	48.0	20.0	17.2
DAH 6-8M	3/8	11.4	8	7.6	6.4	1/2	12.7	49.0	22.0	17.2
DAH 8-12M	1/2	15.2	12	9.5	9.5	5/8	15.88	61.0	24.0	23.5

**DAT****Hose Adapter  
Connects Hose to Female NPT thread**

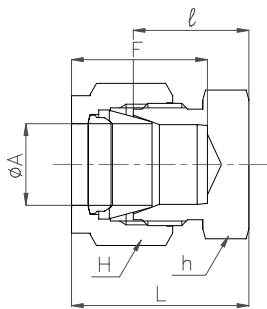
Part No.	A (Hose I. D)		T	E	$E_1$	h (HEX)		L	$\ell$
	in	mm	NPT	mm	mm	in	mm	mm	mm
DAT 2-2	1/8	3.8	1/8	2.0	4.8	7/16	11.11	27.4	10.1
DAT 3-2	3/16	5.8	1/8	3.0	3.0	7/16	11.11	32.3	15.0
DAT 4-2	1/4	7.7	1/8	4.8	4.8	7/16	11.11	37.3	20.0
DAT 6-6	3/8	11.4	3/8	7.6	7.6	11/16	17.46	44.2	22.0
DAT 8-6	1/2	15.2	3/8	9.5	9.5	11/16	17.46	46.0	24.0

	<b>DBA</b>	<b>Plug Fractional tube</b>
--	------------	---------------------------------



Part No.	A (Tube O. D)		H (HEX)	
	in	mm	in	mm
DBA 1	1/16	1.59	5/16	7.94
DBA 2	1/8	3.18	7/16	11.11
DBA 3	3/16	4.76	1/2	12.7
DBA 4	1/4	6.35	9/16	14.29
DBA 5	5/16	7.94	5/8	15.88
DBA 6	3/8	9.53	11/16	17.46
DBA 8	1/2	12.7	7/8	22.23
DBA 10	5/8	15.88	1	25.4
DBA 12	3/4	19.05	1-1/8	28.58
DBA 14	7/8	22.23	1-1/4	31.75
DBA 16	1	25.4	1-1/2	38.1

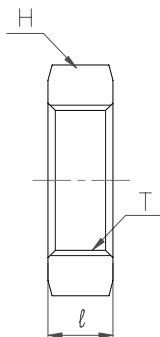
	<b>DCA</b>	<b>Cap Caps end of fractional tube</b>
--	------------	--



H : See dimensional data (Last page)

Part No.	A (Tube O. D)		h (HEX)		$\ell$	L	F
	in	mm	in	mm	mm	mm	mm
DCA 1	1/16	1.59	5/16	7.94	11.0	15.0	8.9
DCA 2	1/8	3.18	7/16	11.11	13.5	20.2	13.0
DCA 3	3/16	4.76	7/16	11.11	15.0	21.7	13.8
DCA 4	1/4	6.35	1/2	12.7	16.0	23.5	15.4
DCA 5	5/16	7.94	9/16	14.29	17.0	24.5	16.3
DCA 6	3/8	9.53	5/8	15.88	18.5	26.0	17.0
DCA 8	1/2	12.7	13/16	20.64	19.5	29.8	23.0
DCA 10	5/8	15.88	15/16	23.81	20.0	30.3	24.6
DCA 12	3/4	19.05	1-1/16	26.99	21.5	31.8	24.6
DCA 14	7/8	22.23	1-3/16	30.16	23.9	34.1	26.1
DCA 16	1	25.4	1-3/8	34.93	26.1	38.7	31.6

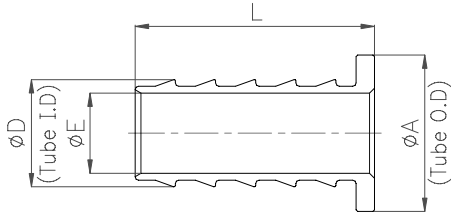
	<b>DNN</b>	<b>Lock Nut for bulkhead type</b>
--	------------	---------------------------------------



Part No.	H (HEX)		T	$\ell$
	in	mm	UNF	mm
DNN 1	5/16	7.94	10-32	4.0
DNN 2	1/2	12.7	5/16-20	4.5
DNN 3	9/16	14.29	3/8-20	5.5
DNN 4	5/8	15.88	7/16-20	6.0
DNN 5	11/16	17.46	1/2-20	6.0
DNN 6	3/4	19.05	9/16-20	6.0
DNN 8	15/16	23.81	3/4-20	7.0
DNN 10	1-1/16	26.99	7/8-20	8.0
DNN 12	1-3/16	30.16	1-20	9.0
DNN 14	1-3/8	34.93	1-1/8-20	10.8
DNN 16	1-5/8	41.28	1-5/16-20	11.9

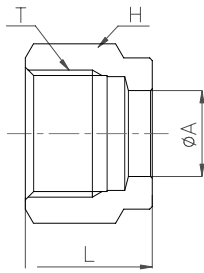
# DTI

Insert (Saw type)  
for fractional plastics tube



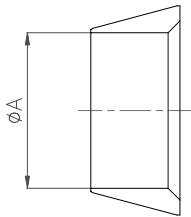
Part No.	A (Tube O. D)		D (Tube I. D)		E	L
	in	mm	in	mm		
DTI 3-2	3/16	4.76	1/8	3.18	2.3	11.9
DTI 4-2	1/4	6.35	1/8	3.18	2.3	11.9
DTI 4-2.5	1/4	6.35	5/32	3.97	2.7	11.9
DTI 4-2.72	1/4	6.35	2.72/16	4.32	2.7	11.9
DTI 4-3	1/4	6.35	3/16	4.76	3.5	11.9
DTI 5-2	5/16	7.94	1/8	3.18	2.3	11.9
DTI 5-3	5/16	7.94	3/16	4.76	3.0	14.3
DTI 5-4	5/16	7.94	1/4	6.35	4.8	14.3
DTI 6-3	3/8	9.53	3/16	4.76	3.0	14.3
DTI 6-4	3/8	9.53	1/4	6.35	4.8	14.3
DTI 8-4	1/2	12.7	1/4	6.35	4.8	19.1
DTI 8-6	1/2	12.7	3/8	9.53	7.9	19.1
DTI 10-6	5/8	15.88	3/8	9.53	7.9	21.5
DTI 10-8	5/8	15.88	1/2	12.7	11.2	21.8
DTI 12-8	3/4	19.05	1/2	12.7	11.2	21.8
DTI 12-10	3/4	19.05	5/8	15.88	14.2	21.8
DTI 16-12	1	25.4	3/4	19.05	17.5	23.8
DTI 16-14	1	25.4	7/8	22.23	20.6	23.8

	DNA	Nut Fractional tube
--	-----	------------------------



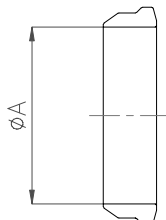
Part No.	A (Tube O. D)		H (HEX)		L	T (Straight thread)
	in	mm	in	mm		
DNA 1	1/16	1.59	5/16	7.94	8.0	10-32UNF
DNA 2	1/8	3.18	7/16	11.11	11.9	5/16-20UN
DNA 3	3/16	4.76	1/2	12.7	11.9	3/8-20UN
DNA 4	1/4	6.35	9/16	14.29	12.7	7/16-20UNF
DNA 5	5/16	7.94	5/8	15.88	13.5	1/2-20UNF
DNA 6	3/8	9.53	11/16	17.46	14.2	9/16-20UN
DNA 8	1/2	12.7	7/8	22.23	17.5	3/4-20UNEF
DNA 10	5/8	15.88	1	25.4	17.5	7/8-20UNEF
DNA 12	3/4	19.05	1-1/8	28.58	17.5	1-20UNEF
DNA 14	7/8	22.23	1-1/4	31.75	17.5	1-1/8-20UN
DNA 16	1	25.4	1-1/2	38.1	20.6	1-5/16-20UN

	DOF	Front Ferrule Fractional tube
--	-----	----------------------------------

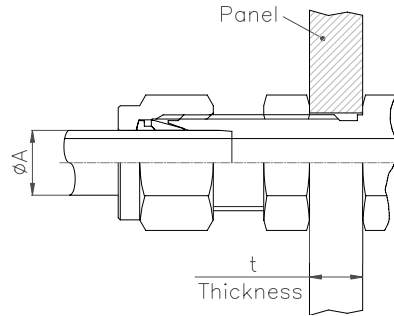
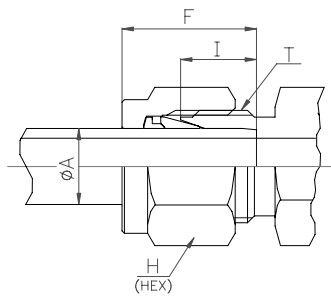


Part No.	A (Tube O. D)	
	in	mm
DOF 1	1/16	1.59
DOF 2	1/8	3.18
DOF 3	3/16	4.76
DOF 4	1/4	6.35
DOF 5	5/16	7.94
DOF 6	3/8	9.53
DOF 8	1/2	12.7
DOF 10	5/8	15.88
DOF 12	3/4	19.05
DOF 14	7/8	22.23
DOF 16	1	25.4

	DOB	Back Ferrule Fractional tube
--	-----	---------------------------------



Part No.	A (Tube O. D)	
	in	mm
DOB 1	1/16	1.59
DOB 2	1/8	3.18
DOB 3	3/16	4.76
DOB 4	1/4	6.35
DOB 5	5/16	7.94
DOB 6	3/8	9.53
DOB 8	1/2	12.7
DOB 10	5/8	15.88
DOB 12	3/4	19.05
DOB 14	7/8	22.23
DOB 16	1	25.4



### Fractional tube series

Nominal Size	Tube end dimensional data						Panel size for Bulkhead		
	A (Tube O.D)		T Unified Straight thread	I	H (Hex)		F	Panel Hole Drill dia	Panel wall thickness(t)
	in	mm			mm	in			
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

Nominal Size	Tube end dimensional data						Panel size for Bulkhead		
	A (Tube O.D)		T Unified Straight thread	I	H (Hex)		F	Panel Hole Drill dia	Panel wall thickness(t)
	mm	mm			mm	mm			
2M	2		1/4-24	5.6	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	10		5/8-20	9.5	1 9		17.3	16.3	11.6
12M	12		3/4-20	12.7	2 2		22.9	19.4	13.1
15M	15		7/8-20	14.3	2 7		24.3	22.6	12.0
16M	16		7/8-20	14.3	2 7		24.5	22.6	12.0
18M	18		1-20	14.3	3 0		24.5	25.8	16.7
20M	20		1-1/16-20	14.3	3 0		24.5	27.0	16.7
22M	22		1-1/8-20	15.9	3 2		26.1	29.0	16.7
25M	25		1-5/16-20	19.1	4 1		31.6	33.7	20.0

### Schedule pipe series

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

