



Pipeline Components



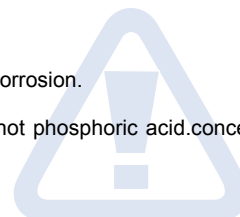
P i p e l i n e C o m p o n e n t s



3. PIPELINE COMPONENTS

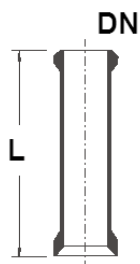
- The max. operation temperature is 150°C
- The max. temperature difference of medium is 120°C
- All sections are vacuum-sealed.
- All organic and inorganic medium is anti-corrosion.

(Not include the hydrofluoric acid.fluoride.hot phosphoric acid.concentrated alkali under high temperature)



- According to diameters, the maximum operating pressures (Mpa) is following:

DN	DN15	DN20	DN25	DN40	DN50	DN80	DN100	DN150	DN165 Φ180	DN200	DN215 Φ230	DN300 Φ315	DN400	DN600
MPa	0.2	0.2	0.15	0.15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.07	0.07



3.1 Section

3.1.1 Pipe Sections Type A

DN Lmm	DN15 CAT. NO.	DN25 CAT. NO.	DN40 CAT. NO.	DN50 CAT. NO.	DN80 CAT. NO.
100	QGD-15/100A	QGD-25/100A	QGD-40/100A	QGD-50/100A	QGD-80/100A
125	QGD-15/125A	QGD-25/125A	QGD-40/125A	QGD-50/125A	QGD-80/125A
150	QGD-15/150A	QGD-25/150A	QGD-40/150A	QGD-50/150A	QGD-80/150A
175	QGD-15/175A	QGD-25/175A	QGD-40/175A	QGD-50/175A	QGD-80/175A
200	QGD-15/200A	QGD-25/200A	QGD-40/200A	QGD-50/200A	QGD-80/200A
300	QGD-15/300A	QGD-25/300A	QGD-40/300A	QGD-50/300A	QGD-80/300A
400	QGD-15/400A	QGD-25/400A	QGD-40/400A	QGD-50/400A	QGD-80/400A
500	QGD-15/500A	QGD-25/500A	QGD-40/500A	QGD-50/500A	QGD-80/500A
700	QGD-15/700A	QGD-25/700A	QGD-40/700A	QGD-50/700A	QGD-80/700A
1000	QGD-15/1000A	QGD-25/1000A	QGD-40/1000A	QGD-50/1000A	QGD-80/1000A
1500	QGD-15/1500A	QGD-25/1500A	QGD-40/1500A	QGD-50/1500A	QGD-80/1500A
2000	QGD-15/2000A	QGD-25/2000A	QGD-40/2000A	QGD-50/2000A	QGD-80/2000A
2500		QGD-25/2500A	QGD-40/2500A	QGD-50/2500A	QGD-80/2500A

L>2,500mm pipe must be specially ordered.



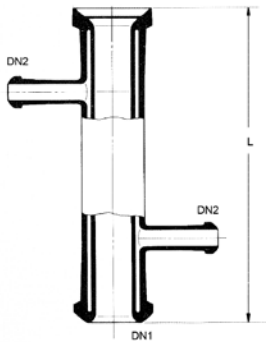
3.1.2 Pipe Sections Type B

DN Lmm	DN15 CAT. NO.	DN25 CAT. NO.	DN40 CAT. NO.	DN50 CAT. NO.	DN80 CAT. NO.	DN100 CAT. NO.
100	QGD-15/100B	QGD-25/100B	QGD-40/100B	QGD-50/100B	QGD-80/100B	QGD-100/100B
125	QGD-15/125B	QGD-25/125B	QGD-40/125B	QGD-50/125B	QGD-80/125B	QGD-100/125B
150	QGD-15/150B	QGD-25/150B	QGD-40/150B	QGD-50/150B	QGD-80/150B	QGD-100/150B
175	QGD-15/175B	QGD-25/175B	QGD-40/175B	QGD-50/175B	QGD-80/175B	QGD-100/175B
200	QGD-15/200B	QGD-25/200B	QGD-40/200B	QGD-50/200B	QGD-80/200B	QGD-100/200B
300	QGD-15/300B	QGD-25/300B	QGD-40/300B	QGD-50/300B	QGD-80/300B	QGD-100/300B
400	QGD-15/400B	QGD-25/400B	QGD-40/400B	QGD-50/400B	QGD-80/400B	QGD-100/400B
500	QGD-15/500B	QGD-25/500B	QGD-40/500B	QGD-50/500B	QGD-80/500B	QGD-100/500B
700	QGD-15/700B	QGD-25/700B	QGD-40/700B	QGD-50/700B	QGD-80/700B	QGD-100/700B
1000	QGD-15/1000B	QGD-25/1000B	QGD-40/1000B	QGD-50/1000B	QGD-80/1000B	QGD-100/1000B
1500	QGD-15/1500B	QGD-25/1500B	QGD-40/1500B	QGD-50/1500B	QGD-80/1500B	QGD-100/1500B
2000	QGD-15/2000B	QGD-25/2000B	QGD-40/2000B	QGD-50/2000B	QGD-80/2000B	QGD-100/2000B
2500		QGD-25/2500B	QGD-40/2500B	QGD-50/2500B	QGD-80/2500B	QGD-100/2500B

L>2,500mm pipe must be specially ordered.

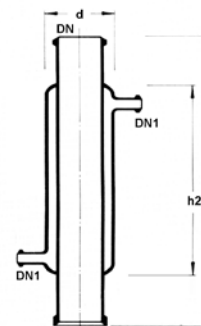
3.13 Jacketed Tube

Jacketed Tube Type A



DN1	DN2	L mm	CAT. NO.
25	15	150	QGD-JT-25/150A
		175	QGD-JT-25/175A
		200	QGD-JT-25/200A
		300	QGD-JT-25/300A
		400	QGD-JT-25/400A
		500	QGD-JT-25/500A
40	15	175	QGD-JT-40/175A
		200	QGD-JT-40/200A
		300	QGD-JT-40/300A
		400	QGD-JT-40/400A
		500	QGD-JT-40/500A
50	15	200	QGD-JT-50/200A
		300	QGD-JT-50/300A
		400	QGD-JT-50/400A
		500	QGD-JT-50/500A

PIPELINE COMPONENTS



Jacketed Tube Type B

DN	DN1	L mm	d mm	h2 mm	CAT NO.
25	25	500	60	380	QGD-JT-25/500B
		1000	60	880	QGD-JT-25/1000B
40		500	70	380	QGD-JT-40/500B
		1000	70	880	QGD-JT-40/1000B
50		500	90	380	QGD-JT-50/500B
		1000	90	880	QGD-JT-50/1000B
80		500	113	360	QGD-JT-80/500B
		1000	113	860	QGD-JT-80/1000B
100*		500	135	360	QGD-JT-100/500B
		1000	135	860	QGD-JT-100/1000B
150*		500	180	340	QGD-JT-150/500B
		1000	180	840	QGD-JT-150/1000B
Φ180*		500	230	300	QGD-JT-180/500B
		1000	230	800	QGD-JT-180/1000B
Φ230*		500	270	300	QGD-JT-230/500B
		1000	270	800	QGD-JT-230/1000B
300*		500	370	300	QGD-JT-300/500B
		1000	370	800	QGD-JT-300/1000B

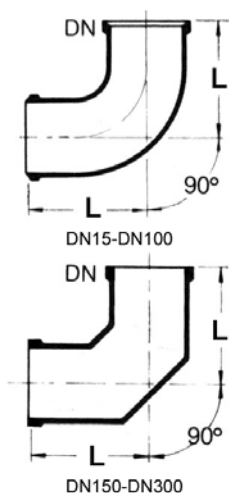
* DN100-DN300 are plane ground joints.



- Hot water, vapor, heating oil and cooling salt water are allowed in the jacketed tube.
- If necessary, the side outlet can be vacuum-sealed.
- The operating pressure of the system is ≤ 0.1 Mpa.
- The operating pressure of the jacketed tube is ≤ 0.05 Mpa
- Temperature must be $\leq 150^\circ\text{C}$.

3.2 Bends

3.2.1 90° Bends

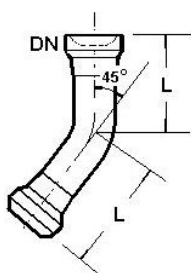


DN	L mm	CAT. NO.
15	50	QGJ-WT-15/90
25	100	QGJ-WT-25/90
40	150	QGJ-WT-40/90
50	150	QGJ-WT-50/90
80	200	QGJ-WT-80/90
100*	250	QGJ-WT-100/90
150	250	QGJ-WT-150/90
Φ180	250	QGJ-WT-180/90
200	300	QGJ-WT-200/90
Φ230	300	QGJ-WT-230/90
300	400	QGJ-WT-300/90

* DN100 is plane joint.

Relative sizes of 80°/100° bends are the same as 90° bends.

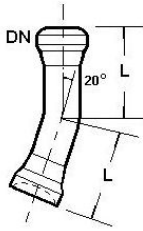
3.2.2 135° Bends



DN	L mm	CAT. NO.
15	50	QGJ-WT-15/135
25	75	QGJ-WT-25/135
40	100	QGJ-WT-40/135
50	100	QGJ-WT-50/135
80	125	QGJ-WT-80/135
100*	175	QGJ-WT-100/135
150*	200	QGJ-WT-150/135
Φ180*	200	QGJ-WT-180/135
200	200	QGJ-WT-200/135
Φ230*	200	QGJ-WT-230/135
300*	200	QGJ-WT-300/135

* DN100-DN300 are plane joints.

3.2.3 160° Bends



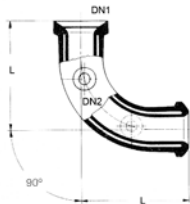
DN	L mm	CAT. NO.
15	50	QGJ-WT-15/160
25	75	QGJ-WT-25/160
40	100	QGJ-WT-40/160
50	100	QGJ-WT-50/160
80	125	QGJ-WT-80/160
100*	175	QGJ-WT-100/160
150*	175	QGJ-WT-150/160
Φ180*	200	QGJ-WT-180/160
200	200	QGJ-WT-200/160
Φ230*	200	QGJ-WT-230/160
300*	200	QGJ-WT-300/160

* DN100-DN300 are plane joints.

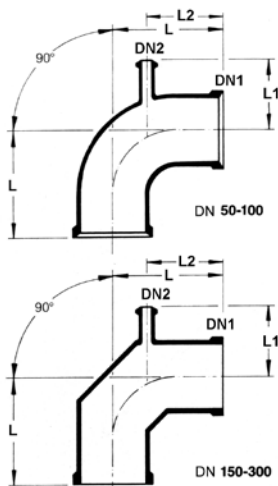
3.2.4 Jacketed Bends



- The operating pressure of the system is ≤ 0.1 Mpa.
- The operating pressure of the jacketed tube is ≤ 0.05 Mpa.
- Temperature must be $\leq 150^\circ\text{C}$.



DN1	DN2	L mm	CAT. NO.
25	15	100	QGJ-WT-JT-25/90
40		150	QGD-WT-JT-40/90
50		150	QGD-WT-JT-50/90



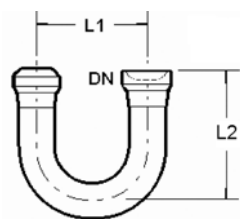
3.2.5 90° Bends with Thermometer Branch

DN1	DN2	L mm	L1 mm	L2 mm	CAT. NO.
50	25	150	100	75	QGJ-WT-50/90C
80	25	200	110	100	QGJ-WT-80/90C
100*	25	250	125	100	QGJ-WT-100/90C
150	25	250	150	150	QGJ-WT-150/90C
Φ180	25	250	150	150	QGJ-WT-180/90C
200	25	300	175	150	QGJ-WT-200/90C
Φ230	25	300	175	175	QGJ-WT-230/90C
300	25	400	225	225	QGJ-WT-300/90C

* DN100-DN300 are plane joints.

3.3 U Bends

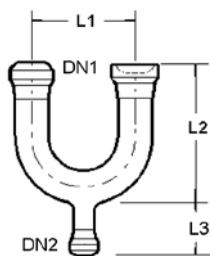
3.3.1 U Bends



DN	L1 mm	L2 mm	CAT. NO.
15	100	100	QGJ-WT -15U
25	150	150	QGJ-WT -25U
40	175	150	QGJ-WT -40U
50	150	175	QGJ-WT -50U
80	250	250	QGJ-WT -80U
100*	300	325	QGJ-WT -100U

* DN100 is plane joint.

3.3.2 U Bends with Bottom Outlet

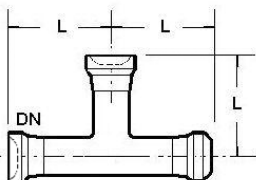
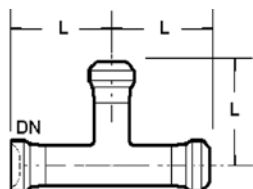


DN1	DN2	L1 mm	L2 mm	L3 mm	CAT. NO.
15	15	100	100	50	QGJ-WT -15/15U
25	25	150	150	60	QGJ-WT -25/25U
40	25	175	150	65	QGJ-WT -40/25U
	40	175	150	65	QGJ-WT -40/40U
50	25	150	175	65	QGJ-WT -50/25U
	40	150	175	65	QGJ-WT -50/40U
	50	150	175	75	QGJ-WT -50/50U
80	25	250	250	60	QGJ-WT -80/25U
	40	250	250	65	QGJ-WT -80/40U
	50	250	250	80	QGJ-WT -80/50U
	80	250	250	90	QGJ-WT -80/80U
100*	25	300	325	65	QGJ-WT -100/25U
	40	300	325	65	QGJ-WT -100/40U
	50	300	325	75	QGJ-WT -100/50U
	80	300	325	85	QGJ-WT -100/80U
	100	300	325	95	QGJ-WT -100/100U

* DN100 is plane joint.

3.4 Tees

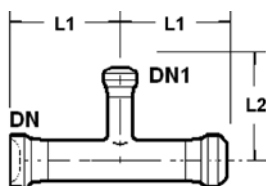
3.4.1 Equal Tees Type A



DN	L mm	CAT. NO.
15	75	QGJ-ST-15A1
25	100	QGJ-ST-25A1
40	150	QGJ-ST-40A1
50	150	QGJ-ST-50A1
80	200	QGJ-ST-80A1
100*	250	QGJ-ST-100A1
150*	250	QGJ-ST-150A1
15	75	QGJ-ST-15A2
25	100	QGJ-ST-25A2
40	150	QGJ-ST-40A2
50	150	QGJ-ST-50A2
80	200	QGJ-ST-80A2
100*	250	QGJ-ST-100A2
150*	250	QGJ-ST-150A2

* DN100/DN150 are plane joints.

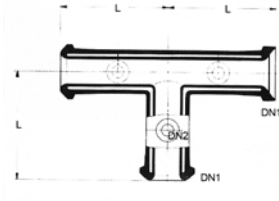
3.4.2 Unequal Tees Type B



DN	DN1	L1 mm	L2 mm	CAT. NO.
25	15	100	75	QGJ-ST-25/15B
40	15	150	85	QGJ-ST-40/15B
	25	150	100	QGJ-ST-40/25B
50	25	150	100	QGJ-ST-50/25B
	40	150	100	QGJ-ST-50/40B
80	25	200	150	QGJ-ST-80/25B
	40	200	150	QGJ-ST-80/40B
	50	200	150	QGJ-ST-80/50B
100*	25	250	150	QGJ-ST-100/25B
	40	250	150	QGJ-ST-100/40B
	50	250	150	QGJ-ST-100/50B
	80	250	150	QGJ-ST-100/80B

* DN100 is plane joint.

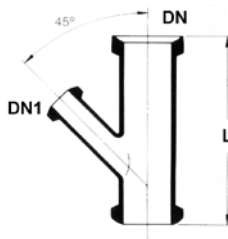
3.4.3 Jacketed Tees



- The operating pressure of the system is $\leq 0.1\text{Mpa}$
- The operating pressure of the jacketed tube is $\leq 0.05\text{Mpa}$
- Temperature must be $\leq 150^\circ\text{C}$

DN1	DN2	L mm	CAT. NO.
25	15	100	QGJ-ST-JT-25
40		150	QGJ-ST-JT-40
50		150	QGJ-ST-JT-50

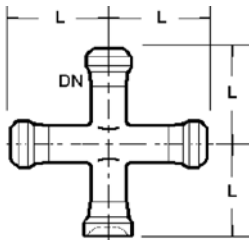
3.5 Y Piece 45°



DN	DN1	L mm	CAT. NO.
15	15	125	QGJ-Y-15
25	25	200	QGJ-Y-25
40		225	QGJ-Y-40
50		250	QGJ-Y-50
80		300	QGJ-Y-80
100*		400	QGJ-Y-100

* DN100 is plane joint.

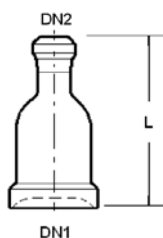
3.6 Equal Cross



DN	L mm	CAT. NO.
15	75	QGJ-SIT-15
25	100	QGJ-SIT-25
40	150	QGJ-SIT-40
50	150	QGJ-SIT-50
80	200	QGJ-SIT-80
100*	250	QGJ-SIT-100
150*	250	QGJ-SIT-150

* DN100/DN150 are plane joints.

3.7 Reducers



DN1	DN2	L mm	CAT. NO.
25	15	100	QGJ-BJ-25/15
40	15		QGJ-BJ-40/15
	25		QGJ-BJ-40/25
50	15		QGJ-BJ-50/15
	25	QGJ-BJ-50/25	
	40	QGJ-BJ-50/40	
80	15	125	QGJ-BJ-80/15
	25		QGJ-BJ-80/25
	40		QGJ-BJ-80/40
	50		QGJ-BJ-80/50
100*	15	150	QGJ-BJ-100/15
	25		QGJ-BJ-100/25
	40		QGJ-BJ-100/40
	50		QGJ-BJ-100/50
	80		QGJ-BJ-100/80

* DN100 is plane joint.

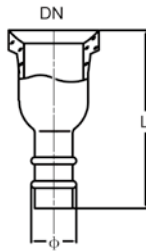
3.8 Closures



DN	L mm	CAT. NO.
15	70	QGJ-MD-15
25	80	QGJ-MD-25
40	85	QGJ-MD-40
50	85	QGJ-MD-50
80	100	QGJ-MD-80
100*	130	QGJ-MD-100

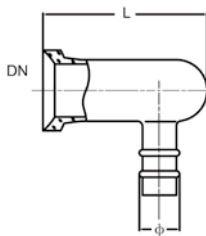
* DN100 is plane joint.

3.9 Hose Connectors



Type A

DN	φ mm	L mm	CAT. NO.
15	~22	100	QGJ-JG-15A
25	~32	125	QGJ-JG -25A
40	~41	150	QGJ-JG -40A
50	~54	150	QGJ-JG -50A



Type B

DN	φ mm	L mm	CAT. NO.
15	~22	90	QGJ-JG -15B
25	~32	100	QGJ-JG -25B
40	~41	120	QGJ-JG -40B
50	~54	150	QGJ-JG -50B





3.10 Static Mixer

They are mainly used to cut, separate, stir, mix, or change the flow direction of the liquid by using static spiral glass units to produce effect of "torrent" and frequent exchange, thus evenly mixing two different liquids.

DN	L mm	CAT. NO.
50	1000	QGJ-JTH -50

