

Couplings & Gaskets

C o u p l i n g s & G a s k e t s

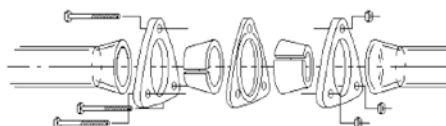
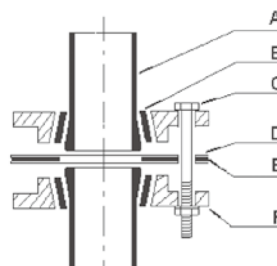


10. COUPLINGS & GASKETS

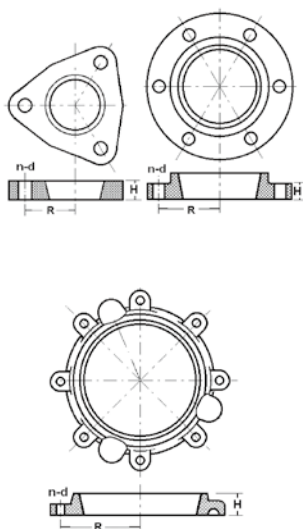
The correct choice of flanges and sealing washers is very important for safe operation of glass apparatus.

10.1 Coupling

- A Pipeline
- B Washer
- C Bolt
- D PTFE
- E Cushion
- F Flanges

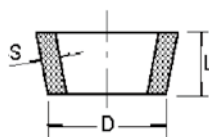


10.1.1 Flanges



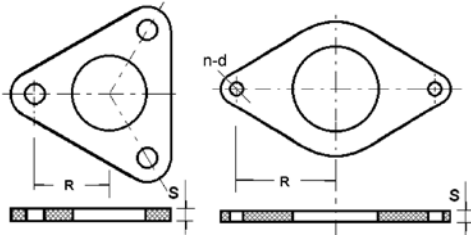
| SIZE | R mm | H mm | n-d mm | MATERIAL | CAT. NO. |
|------|---------|---------|-----------|---|-------------|
| 1/2" | 20 | 10 | 3-Φ4.5 | Reinforced phenolic compression moulding compound | KPJ-FL-0.5 |
| 3/4" | 30 | 14 | 3-Φ6 | | KPJ-FL-0.75 |
| 1" | 35 | 17 | 3-Φ8.5 | | KPJ-FL-25 |
| 1.5" | 42 | 20 | 3-Φ10 | | KPJ-FL-40 |
| 2" | 55 | 22 | 4-Φ8 | | KPJ-FL-50 |
| 3" | 70 | 24.5 | 6-Φ10.5 | | KPJ-FL-80 |
| 4" | 88 | 28.5 | 6-Φ8.5 | | KPJ-FL-100 |
| 7" | 128 | 32 | 8-Φ12 | Aluminum | KPJ-FL-180L |
| 9" | 155 | 34 | 8-Φ12 | Aluminum | KPJ-FL-230L |

10.1.2 Bushings



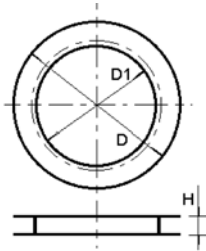
| SIZE | D mm | S mm | L mm | CAT. NO. |
|------|---------|---------|---------|-------------|
| 1/2" | 28 | 4 | 10 | KPJ-JQ-0.5 |
| 3/4" | 37 | 5 | 15 | KPJ-JQ-0.75 |
| 1" | 45 | 6.2 | 17.5 | KPJ-JQ-25 |
| 1.5" | 58 | 6.5 | 18.5 | KPJ-JQ-40 |
| 2" | 73.5 | 7.5 | 22.5 | KPJ-JQ-50 |
| 3" | 102 | 8.5 | 24.5 | KPJ-JQ-80 |
| 4" | 134 | 9 | 28.5 | KPJ-JQ-100 |
| 7" | 185 | 10 | 33 | KPJ-JQ-180 |
| 9" | 254 | 12 | 35 | KPJ-JQ-230 |

10.1.3 Cushions



| SIZE | S mm | R mm | n-d | CAT. NO. |
|------|---------|---------|---------|-------------|
| 1/2" | 3 | 20 | 3-Φ4.5 | KPJ-JD-0.5 |
| 3/4" | 3.5 | 30 | 3-Φ6 | KPJ-JD-0.75 |
| 1" | 4.5 | 35 | 3-Φ8.5 | KPJ-JD-25 |
| 1.5" | 4.5 | 42 | 3-Φ10 | KPJ-JD-40 |
| 2" | 5.5 | 55 | 2-Φ10 | KPJ-JD-50 |
| 3" | 6 | 70 | 2-Φ10.5 | KPJ-JD-80 |
| 4" | 6 | 88 | 2-Φ12 | KPJ-JD-100 |
| 7" | 6 | 128 | 2-Φ13 | KPJ-JD-180 |
| 9" | 6 | 155 | 2-Φ13 | KPJ-JD-230 |

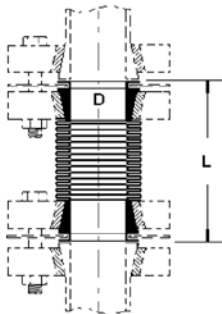
10.1.4 PTFE Cushions



| SIZE | D mm | D1 mm | H mm | CAT. NO. |
|------|---------|----------|---------|--------------|
| 1/2" | 26.5 | 13 | 3 | KPJ-SFT-0.5 |
| 3/4" | 36.5 | 20 | 3.5 | KPJ-SFT-0.75 |
| 1" | 45.5 | 25 | 4 | KPJ-SFT-25 |
| 1.5" | 58.5 | 38.5 | 4 | KPJ-SFT-40 |
| 2" | 73.5 | 48.5 | 5 | KPJ-SFT-50 |
| 3" | 102 | 76.5 | 6 | KPJ-SFT-80 |
| 4" | 140 | 104.5 | 6 | KPJ-SFT-100 |
| 7" | 205 | 168 | 7 | KPJ-SFT-180 |
| 9" | 257 | 216 | 7 | KPJ-SFT-230 |

Should be used together with cushions.

10.1.5 PTFE Bellows



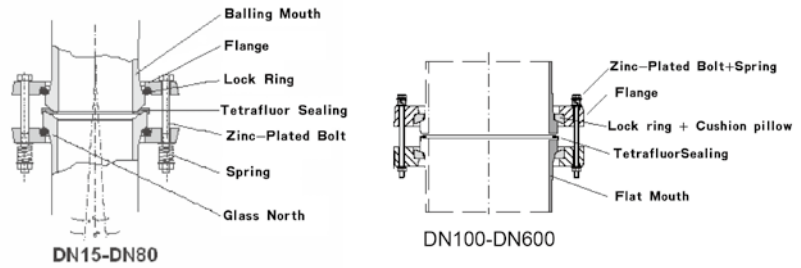
| SIZE | D mm | L mm | CAT. NO. |
|------|---------|---------|--------------|
| 3/4" | Φ35 | ~119 | KPJ-RLJ-0.75 |
| 1" | Φ43 | ~199 | KPJ-RLJ-25 |
| 1.5" | Φ56 | ~133 | KPJ-RLJ-40 |
| 2" | Φ71 | ~145 | KPJ-RLJ-50 |
| 3" | Φ100 | ~160 | KPJ-RLJ-80 |
| 4" | Φ131 | ~172 | KPJ-RLJ-100 |

10.1.6 Bole



| | | | | | | | | |
|-------|-------|-------|-------|--------|--------|--------|---------|---------|
| 1/2" | 3/4" | 1" | 1.5" | 2" | 3" | 4" | 7" | 9" |
| M4*40 | M6*70 | M8*80 | M8*90 | M8*100 | M8*100 | M8*100 | M10*140 | M10*140 |

10.2 Connection illustration for pipes with spherical joints



10.2.1 Flanges

Type A Bakelite



DN15-DN300

| DN | n | d mm | Material | CAT. NO. |
|-----|----|---------|---------------|--------------|
| 15 | 3 | Φ7 | bakelite /SMC | QPJ-FL-15/S |
| 25 | 3 | Φ9 | | QPJ-FL-25/S |
| 40 | 3 | Φ9 | | QPJ-FL-40/S |
| 50 | 3 | Φ9.5 | | QPJ-FL-50/S |
| 80 | 6 | Φ9.5 | | QPJ-FL-80/S |
| 100 | 6 | Φ9.5 | | QPJ-FL-100/S |
| 150 | 8 | Φ9.5 | | QPJ-FL-150/S |
| 200 | 6 | Φ11.5 | | QPJ-FL-200/S |
| 300 | 12 | Φ13 | SMC | QPJ-FL-300/S |

Type B Metal

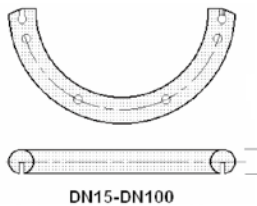


| DN | n | d mm | Material | CAT. NO. | |
|------|----|---------|------------------------------|-------------------|--------------|
| 15 | 3 | Φ7 | Aluminum coated with plastic | QPJ-FL-15/L | |
| 25 | 3 | Φ7 | | QPJ-FL-25/L | |
| 40 | 3 | Φ8.5 | | QPJ-FL-40/L | |
| 50 | 3 | Φ8.5 | | QPJ-FL-50/L | |
| 80 | 6 | Φ9 | | QPJ-FL-80/L | |
| 100 | 6 | Φ9 | | QPJ-FL-100/L | |
| 150 | 6 | Φ11 | | QPJ-FL-150/L | |
| Φ180 | 8 | Φ11 | | QPJ-FL-180/L | |
| 200 | 8 | Φ12 | | QPJ-FL-200/L | |
| Φ230 | 8 | Φ12 | | QPJ-FL-230/L | |
| 300 | 12 | Φ12 | | QPJ-FL-300/L | |
| 400 | 16 | Φ12 | | A3 Plastic coated | QPJ-FL-400/A |
| 600 | 36 | Φ12 | | A3 Plastic coated | QPJ-FL-600/A |

10.2.2 Inserts

Type A Bakelite insert

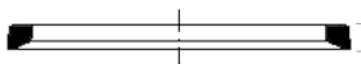
- It is made of thermoset, which improves the property of high temperature aging.
- DN150-DN600 inserts need special flat gasket to ensure the life of the glass parts.



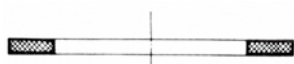
| DN | MATERIAL | CAT. NO. |
|------|----------------|--------------|
| 15 | bakelite / SMC | QPJ-DQ-25/S |
| 25 | | QPJ-DQ-40/S |
| 40 | | QPJ-DQ-50/S |
| 50 | | QPJ-DQ-80/S |
| 80 | | QPJ-DQ-100/S |
| 100 | | QPJ-DQ-100/S |
| 150 | | QPJ-DQ-150/S |
| Φ180 | | QPJ-DQ-180/S |
| 200 | | QPJ-DQ-200/S |
| Φ230 | | QPJ-DQ-230/S |
| 300 | | QPJ-DQ-300/S |
| 400 | A3 | QPJ-DQ-300/A |
| 600 | | QPJ-DQ-300/A |

Type B Spring insert

For high-temperature state



DN150-DN600



DN150-DN600

| DN | MATERIAL | CAT. NO. |
|-----|---------------------|--------------|
| 15 | A3/ stainless steel | QPJ-DQ-15/B |
| 25 | | QPJ-DQ-25/B |
| 40 | | QPJ-DQ-40/B |
| 50 | | QPJ-DQ-50/B |
| 80 | | QPJ-DQ-80/B |
| 100 | | QPJ-DQ-100/B |
| 150 | | QPJ-DQ-150/B |

10.2.3 Flat Gasket

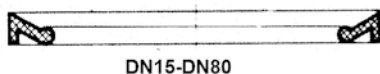
It is made of special fiber cloth and rubber, resistant to corrosion and high temperature. It is mainly used for DN150-DN600 flanges.



10.2.4 PTFE

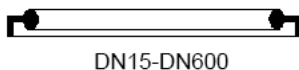
Gasket is made of PTFE which can guarantee the air tightness of the glass parts.

Type A For spherical joints

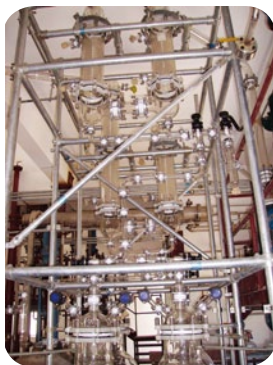


| DN | CAT. NO. |
|----|------------|
| 15 | QPJ-MF-15Q |
| 25 | QPJ-MF-25Q |
| 40 | QPJ-MF-40Q |
| 50 | QPJ-MF-50Q |
| 80 | QPJ-MF-80Q |

Type B For plane joints



| DN | CAT. NO. |
|------|-------------|
| 15 | QPJ-MF-15P |
| 25 | QPJ-MF-25P |
| 40 | QPJ-MF-40P |
| 50 | QPJ-MF-50P |
| 80 | QPJ-MF-80P |
| 100 | QPJ-MF-100P |
| 150 | QPJ-MF-150P |
| Φ180 | QPJ-MF-180P |
| 200 | QPJ-MF-200P |
| Φ230 | QPJ-MF-230P |
| 300 | QPJ-MF-300P |

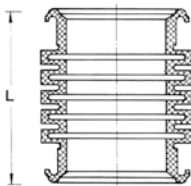


10.2.5 Bellows

PTFE Bellows Type A



DN15-DN50



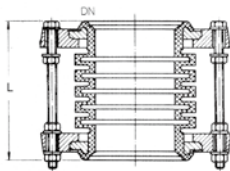
DN80-300

| SIZE | L mm | CAT. NO. |
|------|---------|---------------|
| 15 | 100 | QPJ-RLJ-15/A |
| 25 | 100 | QPJ-RLJ-25/A |
| 40 | 125 | QPJ-RJL-40/A |
| 50 | 150 | QPJ-RJL-50/A |
| 80 | 100 | QPJ-RLJ-80/A |
| 100 | 100 | QPJ-RLJ-100/A |
| 150 | 125 | QPJ-RLJ-150/A |
| Φ180 | 125 | QPJ-RLJ-180/A |
| Φ230 | 150 | QPJ-RLJ-230/A |
| 300 | 175 | QPJ-RLJ-300/A |

If DN15-50 bellows are used under vacuum condition, please specify when ordering.

PTFE Bellows Type B

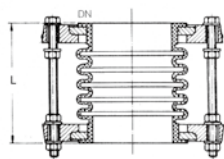
It is used for connections between pipelines of spherical joints:



| SIZE | L mm | CAT. NO. |
|------|---------|---------------|
| 15 | 75 | QPJ-RLJ-15/B |
| 25 | 75 | QPJ-RLJ-25/B |
| 40 | 100 | QPJ-RJL-40/B |
| 50 | 100 | QPJ-RJL-50/B |
| 80 | 100 | QPJ-RLJ-80/B |
| 100 | 100 | QPJ-RLJ-100/B |

PTFE Bellows Type C

It is used for connections between glass pipelines of spherical joints and metal or plastic parts.



| SIZE | L mm | CAT. NO. |
|------|---------|---------------|
| 15 | 75 | QPJ-RLJ-15/C |
| 25 | 75 | QPJ-RLJ-25/C |
| 40 | 100 | QPJ-RJL-40/C |
| 50 | 100 | QPJ-RJL-50/C |
| 80 | 100 | QPJ-RLJ-80/C |
| 100 | 100 | QPJ-RLJ-100/C |



10.2.6 Universal Spacer. PTFE

- Used for compensation between glass pipelines
- Suitable for any kinds of spherical joints (ball and socket).



| DN | L mm | CAT. NO. |
|-----|---------|-------------|
| 15 | 25 | QPJ-TYD-15 |
| 25 | | QPJ-TYD-25 |
| 40 | | QPJ-TYD-40 |
| 50 | | QPJ-TYD-50 |
| 80 | | QPJ-TYD-80 |
| 100 | 50 | QPJ-TYD-100 |

10.2.7 Bolt



| DN | DN15 | DN25 | DN40 | DN50 | DN80 | DN100 | DN150 | DN165 (Φ180) | DN200 | DN215 (Φ230) | DN300 (Φ315) | DN400 | DN600 |
|----------|-------|-------|--------|--------|--------|--------|--------|-----------------|---------|-----------------|-----------------|---------|---------|
| bakelite | M6*75 | M6*85 | M8*110 | M8*120 | M8*130 | M8*130 | M8*120 | ---- | M10*150 | ---- | M10*160 | M10*220 | M10*240 |
| metal | M6*65 | M6*70 | M8*90 | M8*100 | M8*120 | M8*110 | | M10*140 | | M10*140 | | | |

10.2.8 Zinc Coated Springs

| DN | DN15 | DN25 | DN40 | DN50 | DN80 | DN100 | DN150 | DN165 (Φ180) | DN200 | DN215 (Φ230) | DN300 (Φ315) | DN400 | DN600 |
|------|------|------|------|------|------|-------|-------|-----------------|-------|-----------------|-----------------|-------|-------|
| Type | 5# | 5# | 4# | 2# | 2# | 2# | 2# | 6# | 6# | 6# | 6# | 6# | 6# |

 According to customer's request, BOMEX can provide stainless steel bolts and springs.