

**USAGE OUTSIDE THE STANDARD**

- Our products are designed for industrial environments.
- For applications outside the product specification, responsibility lies with the customer.
- Suitability must be tested and approved by the customer.

**TECHNICAL SPECIFICATIONS & MATERIAL INFORMATION**

- Specifications apply to the respective components (heads, cables, wires) and may differ.
- Due to different materials and components (A/B side, cables, etc.) compatibility with the respective application must be verified.
- The customer is obliged to check suitability regarding environmental influences (e.g., temp., hum., etc.) in advance.

**INSTALLATION & DISASSEMBLY NOTES**

- Products must not be connected or disconnected under load.
- In the unmated state, there is no protection against contact – appropriate caution is required.
- For unused interfaces, appropriate protective caps/plugs must be used to protect against media ingress.

**TORQUE VALUES & INSTALLATION INSTRUCTIONS**

- These torque values must be strictly observed. Deviations may lead to functional impairment.
- Values apply exclusively to ESCHA components. When using components from other manufacturers, separate validation is required. Tightening torques overview

Tightening torques overview

Connector		Housing/Flange	
M8	0.6 Nm	M12	1.5 Nm
M12	1.0 Nm	M16	2.0 Nm
Valve A	1.0 Nm		
Valve B/BI	1.0 Nm		
Valve C/CI	0.6 Nm		
M16	1.5 Nm		
M23	2.5 Nm		
7/8"	1.5 Nm		

**MAINTENANCE NOTE**

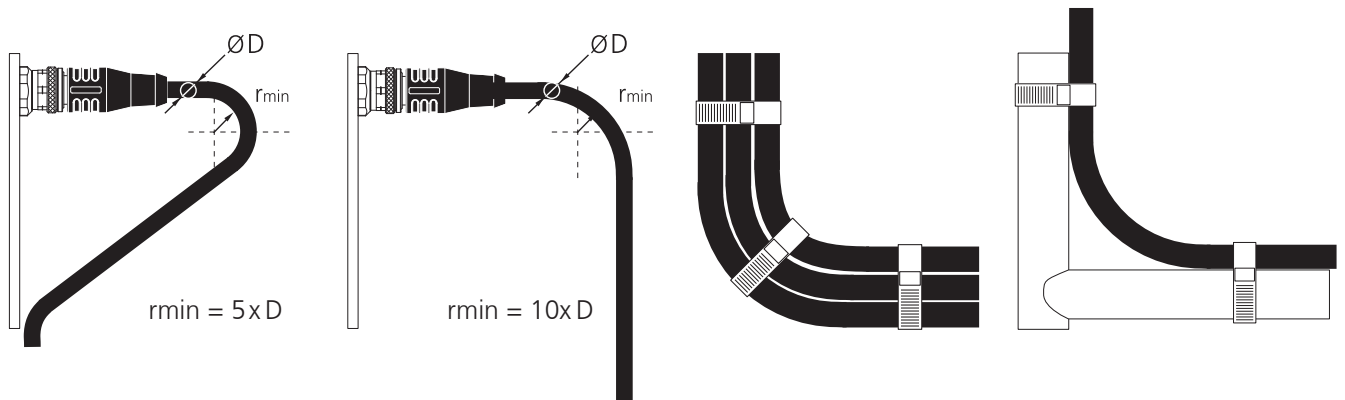
- It is recommended to regularly check the tightening torque to ensure proper function, especially with regard to sealing.
- ESCHA offers perfectly matched torque wrench sets for assembly and testing: [Accessories for connection technology](#)

**IP PROTECTION CLASSES**

- The specified protection classes apply only when mated and screwed together and only in combination with ESCHA components.
- The IP-X8 rating is defined as 2m/24h for standard ESCHA products and 1m/24h for ET products.
- Differences between IPX9 and IPX9K:  
Both test against high-pressure and steam jet cleaning under different standard conditions.

**BENDING RADIUS & INSTALLATION INSTRUCTIONS**

- Minimum bending radii must be observed during installation to ensure mechanical and electrical integrity.
- Correct connector installation and proper cable routing are prerequisites for sealed and reliable electrical connections.
- Data cables are high-performance products; mechanical stress such as crushing, sharp bending, or tensile forces must be avoided.
- Installation at sub-zero temperatures requires special care due to altered material properties.
- Cable ties must not cut into or deform cables.
- Adequate cable length should be ensured to absorb movement energy.
- Cable loops, spiral cables, or energy chains increase system lifetime.



**CURRENT CARRYING CAPACITY & DERATING**

- Rated current refers to an ambient temperature of 40°C.
- At higher temperatures, current rating must be verified.
- Published derating curves apply to power components where available.