



Description:

The outer parts are made of a **high strength aluminum** with a hard anodized surface.

Each segment of the **stator** serves one core of the medium and it is **adjustable** in its position in **60° increments**. The threaded connection size is G1/4" on media side.

Later on the rotary joints are still individually **extendable or reduceable**. Furthermore, single elements can be exchanged.

The inner rotary piston (rotor) is made of **hardened stainless steel**.

Frontally the **rotor** can be connected with the media by **manifold mounting** (O-ring/flange or with the integrated G1/4" threads). Similarly, the connection can be sideways by G1/4".

Furthermore, from above the rotor is to connect with 6x M10 screws or with M8 DIN912 screws from below with the counter part. All components are highly accurate and pinned.

The rotary joints are suitable for many established media.

For example, these include hydraulic oil, compressed air, cooling lubricant, coolant, vacuum (conditional) and various others.

The maximum temperature range is -10 to + 80 ° C.

Because of the above-mentioned materials, the rotary joints have a low weight and the stator connections are in 60° steps freely adjustable.

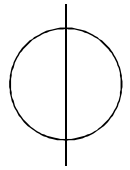
Unused ports of the rotor are protected with plastic screws.



Each segment/line is 6x60° adjustable

Advantages:

- ✓ Modular extendable
- ✓ Light weight
- ✓ Cost-efficient
- ✓ Position of the housing connections adjustable
- ✓ Multifarious connection possibilities
- ✓ Suitable for different media and gases
- ✓ With additional slide bearings



Recommendations for use:

Rotary joints are used wherever a liquid or gaseous medium must be transferred from a stationary to a rotating machine part. For example, in machine tools, rotary tables, excavators, cranes.

The rotary joints may fasten at the 4 threads M8x12 for torque support, only to avoid twisting. They don't have to be tensed up.

Means: There doesn't have to be a side load.

Fast oscillating movements (direction changes <2 sec.) reduce the service life by approximately 30%.

It is important to ensure sufficient media flow to prevent overheating of the rotating union (> 80 ° C).

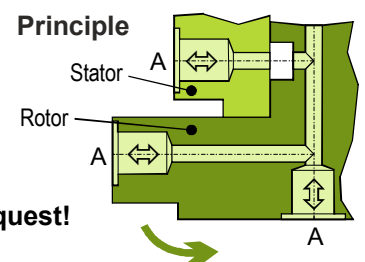
While leading different or several media through the rotary joint, a leakage line is recommended for safety reasons. This can be realized by two additional segments.

Depending on assignment, number of connections and media used, the generated torque and especially the starting torque can vary strongly.

To determine the required driving torque, the values for the calculation can be found on the following page.

To ensure a safe operation, the main use should be specified in the order.

Therefore the data such as pressure, speed, medium and operating temperature are important, to do the potential necessary adjustments for each specific application.



Special solutions on request!

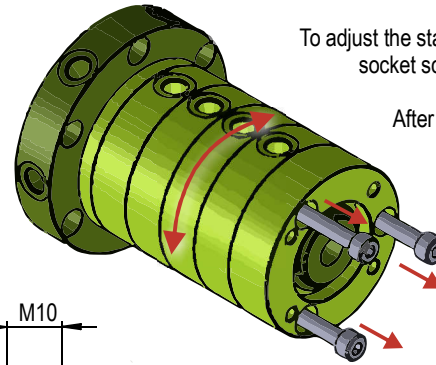
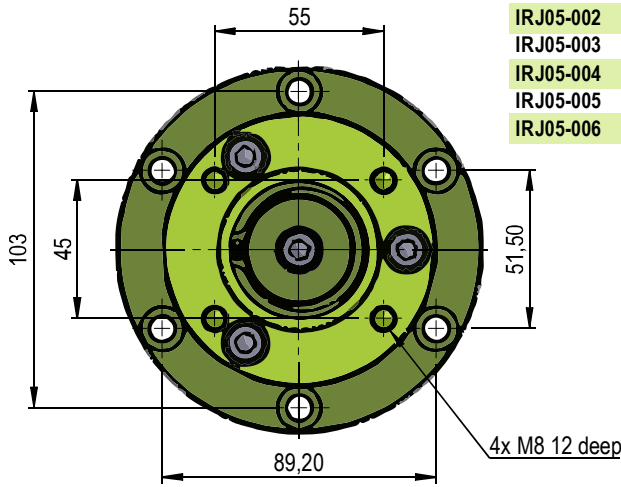
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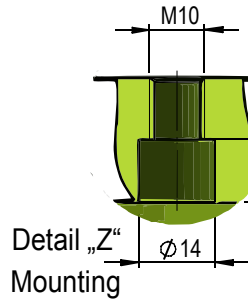
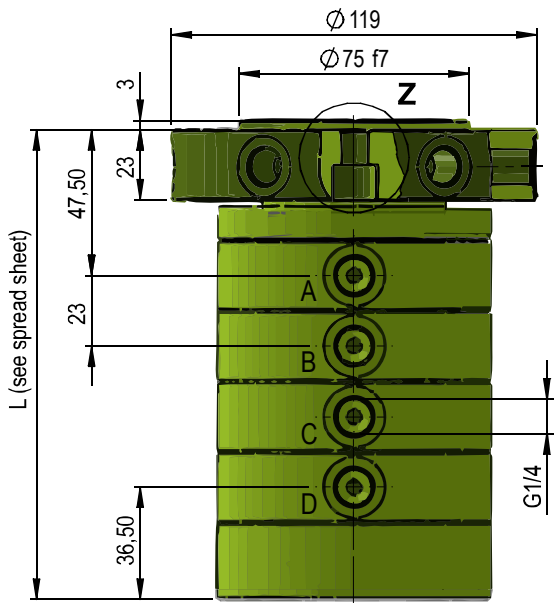
Part number	# Channels	Dim. "L"	Weight (kg)	Used Channels	Leakage rate max.
IRJ05-001	1	84	2,31	A	10 ccm/100h
IRJ05-002	2	107	2,76	A, B	20 ccm/100h
IRJ05-003	3	130	3,21	A, B, C	30 ccm/100h
IRJ05-004	4	153	3,66	A, B, C, D	40 ccm/100h
IRJ05-005	5	176	4,11	A, B, C, D, E	50 ccm/100h
IRJ05-006	6	199	4,56	A, B, C, D, E, F	60 ccm/100h

Leakage rate for HLP22 at 300 bar

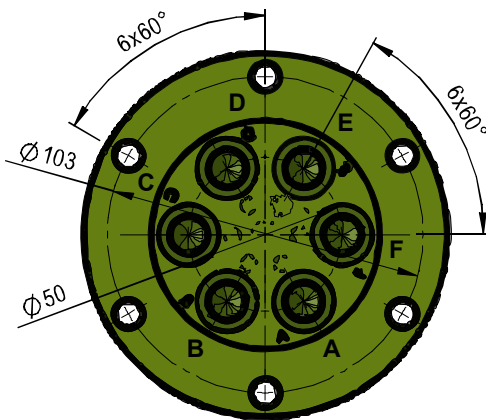
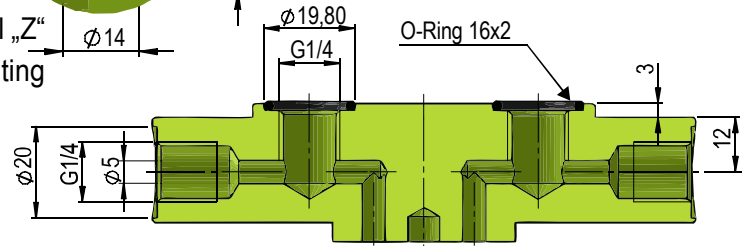


To adjust the stator segments, the 3 hexagon socket screws on the outer circle must be removed. After the adjustment, they must be tightened again with a torque of **40 Nm**. The segments can be set up in **60° increments**.

The same workflow applies to the extension or reduction of the rotary joint. Then the modified length of the screws must be observed.

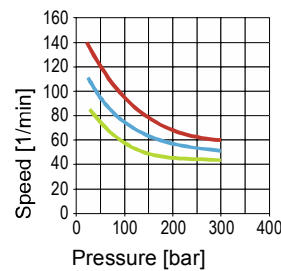


Alternate connecting possibilities

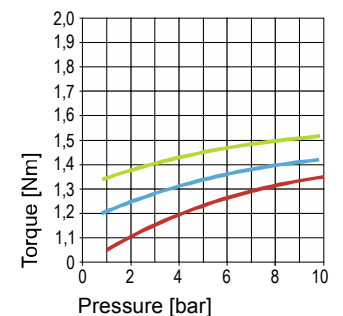
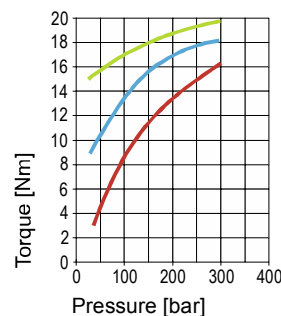
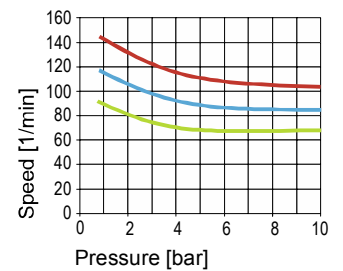


The front connection of the ports can be optionally done by G1/4" or manifold mounting (O-ring/flange; see detail). The rotor can also be fixed with M8 or M10 screws (See detail Z).

Maximum starting-torque and rotation speed for hydraulic oil HLP22



Maximum starting-torque and rotation speed for unooled Air



— 2 Lines — 4 Lines — 6 Lines

The intermediate values for 1, 3 and 5 lines need to be interpolated. These values are given only as a guide!