

# ACF™ ACTIVE CONTACT FLANGE™

Our patented technology instantly automates jobs with a high demand for sensitivity and flexibility. It guarantees extremely short cycle times and radical economic ROI, even with delicate applications. The ACF automates problematic manual work and guarantees high standards of quality. It works with every robot. This even makes retrofitting unbelievably easy and persuasive.

Surface treatment: Sanding, polishing, cleaning, laminating, stripping, brushing, deburring, ironing...

All materials: Steel, aluminum, titanium, magnesium, carbon, plastic, wood, ceramic, coconut fibres...

Contact-sensitive handling: Pick & place, insert, join, pack, assembly, glue, component-testing, quality inspection







#### **Defined contact force**

Interactive compensation for surface tolerances up to 100 mm with guaranteed consistent contact force. No adaptation of the robot tracks.

### Integrated gravitation compensation

The process force remains constant even with changing orientations. No additional application programming required.

#### Passive security and high-speed control

Mechatronic actuator and sensor element with a high degree of process security using a robust mechanical construction with integrated passive safety and high-speed control.

### Simple system integration - highest quality standards

Cleverly simple integration using standard interfaces. The constant feedback on the contact situation, position and actual force smoothly performs the quality inspection.



## ACF HD

- Shorter payback time
- 6 times higher load capacity
- Larger removal rate
- Low weight



## **ACF XS**

- Designed for small robots
- 60 % less weight
- · For work spaces within 1000 mm
- · Ideal for bonding, pressing, insertion, marking, ironing, lamination, ...

### **SPECIFICATIONS**

Product	ACF/ 110/01 XS	ACF/ 111/01 XSHD	ACF/ 110/04	ACF/ 110/10	ACF/ 111/04HD	ACF/ 111/05HD	ACF/ 111/10HD	ACF/ 121/05HD	ACF/ 121/10HD	ACF/ 131/05HD	ACF/ 131/10HD	
Max. force (push/pull) [N]	100	100	100	100	200	250	250	500	500	800	800	
Stroke [mm]	11.5	11.5	35.5	98	35.5	48	98	48	98	48	98	
Max. overturning moment [Nm]	25	25	40	40	250	350	350	350	350	350	350	
Max. torsional moment [Nm]	35	35	30	30	250	350	350	350	350	350	350	
Cross-section area	90 x 75	90 x 75	ø 128	ø 128	ø 128	ø 160						
Max. height [mm]	160	177	230	355	240	289	389	289	389	289	389	
Dead weight [kg]	1.2	1.4	3.2	3.5	3.5	4.9	6.1	5.1	6.3	5.3	6.5	
Power supply	24 V DC ø 6 mm air supply, max. 7 bar, 30 μm, ISO 8573-1 Kl.3 (oil & waterfree)											
Air consumption [l/min]	5-10											
Ambient temperature during operation [C°]	+5 +45											
Protection class	IP 40 IP 65 / if equipped with adequate filters											
Bolt circle ISO 9409-1 standard flange [mm]	ø 50	ø 50	ø 50	ø 50	ø 80							
Communication interface		Standard: Ethernet TCP/IP Optional: Ethernet IP, DeviceNet, Profibus, ProfiNet, Analog I/O, Modbus TCP, Ethernet XML										

FerRobotics Compliant Robot Technology GmbH

Altenbergerstrasse 69 Science Park 1 A-4040 Linz, Austria office@ferrobotics.at

FerRobotics Inc. 59 Prairie Parkway 60136 GILBERTS

Illinois, USA office@ferrobotics.com

