



## 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:** Sand, polish, clean, laminate, strip, brush, remove burrs, iron

**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

**PATENTED  
TECHNOLOGY**

**FERROBOTICS**  
perfect feeling

# ACF

## ACTIVE CONTACT FLANGE

### 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 security 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
- Size unchanged



### 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 XS HD	ACF/110/04	ACF/110/10	ACF/111/04 HD	ACF/111/05 HD	ACF/111/10 HD	ACF/121/05 HD	ACF/121/10 HD	ACF/131/05 HD	ACF/131/10 HD
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	ø128	ø128	ø128	ø160	ø160	ø160	ø160	ø160	ø160
Height (Stroke = 0) [mm]	144	161	191	253	201	237	287	237	287	237	287
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	Standard: DC 24 V / 2 A Optional Service: 24 V / 4 A 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								
Bolt circle ISO 9409-1 standard flange [mm]	ø50	ø50	ø50	ø50	ø80	ø80	ø80	ø80	ø80	ø80	ø80
Communication interface	Standard: Ethernet TCP/IP Optional: Ethernet IP, DeviceNet, Profibus, ProfiNet, CANopen, Analog I/O, Modbus TCP, Ethernet XML										