# Datasheet

# Suction cup DCF110P Polyurethane 60, G3/8" male, 1/8" NPSF female, with mesh filter

## Article number: 0206546



- Special designed friction cups for domed or flat oily surfaces, such as sheets in metal forming processes.
- Long lasting material, normal wear on friction cup will not affect the long term shear force performance.
- Best choice if > 0.1g/m2 press oil is used on the sheet but also a great choice for dry metal sheets.
- Refined internal friction pattern provides additional grip performance, the suction cups can withstand high shear forces, typically 3-5 times more than corresponding conventional suction cups.
- Thin design that easily will follow convex or concave surfaces. The thin and pliable design in combination with a special inner friction pattern will maximize grip performance.
- DURAFLEX® suction cups manufactured in a specially developed material that features the elasticity of rubber and wear resistance of polyurethane. The material does not leave any marks on the objects handled and has a fantastic elastic memory, even after hundreds of thousands of cycles.

Description	Unit	Value			
Suction cup shape	-	Deep Concave			
Application	-	Oily sheet metal			
Suction cup design	-	Round			
Characteristics	-	Oily sheet metal			
Material	-	Polyurethane (PU)			
Weight, min.	g	94.8			
Suction cup model	-	DCF			
Volume	cm <sup>3</sup>	110.2			
Height	mm	50.4			
Outer diameter, min.	mm	112.5			
Outer diameter, actuated	mm	121.2			
Fitting size	-	1/8", 3/8"			
Fitting option	-	Filter mesh			
Fitting style	-	Female/Male			
Fitting type	-	G-thread, NPSF-thread			
Suction cup model	-	DCF110P Oily metal sheet			
Movement, vertical max.	mm	17.2			
Curve radius, min.	mm	153			
Suction cup model	-	DCF110P Dry metal sheet			
Movement, vertical max.	mm	17.2			
Curve radius, min.	mm	153			

### **Performance - Lifting forces**

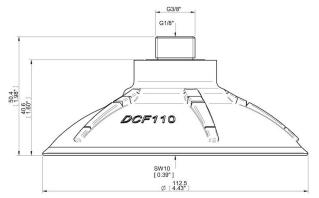
DCF110P Oily metal sheet	Vertical (N)	Parallel (N)
60 -kPa	313	286
90 - kPa	433	358
DCF110P Dry metal sheet		

#### **Technical data**

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DCF110P Oily metal sheet		Vertical (N)	Parallel (N)			
60 -kPa		315	377			
90 -kPa		436	573			
Material						
Name	Polyurethane (PU30)	Polyurethane (PU60)	Polyurethane (PU60)			
Colour	Yellow	Green transparent	Orange			
Temperature, min.   °C	10	10	10			
Temperature max.   °C	50	50	50			
Hardness   <sup>o</sup> Shore A	30	60	60			
Material resistance						
Alcohol	n/a	n/a	n/a			
Concentrated acids	Fair	Fair	Fair			
Ethanol	Fair	Fair	Fair			
Hydrolysis	Fair	Fair	Fair			
Methanol	Poor	Poor	Poor			
Oil	Excellent	Excellent	Excellent			
Oxidation	Poor	Poor	Poor			
Petrol	Fair	Fair	Fair			
Wear resistance	Excellent	Excellent	Excellent			
Weather and ozone	Excellent	Excellent	Excellent			

#### **Dimensional drawings**



# Values specified in this data sheet are tested at (unless otherwise stated):

- •Room temperature (20°C [68°F] ± 3°C [5.5°F]).
- •Standard atmosphere (101.3 [29.9 inHg] ± 1.0 kPa [0.3 inHg]).
- •Relative humidity 20-70%.
- •Compressed air quality, DIN ISO 8573-1 class 4.