

# Precision pressure regulator FR 1

- single stage with balanced main valve for mbar applications and instrumentation



Fittings and gauges optional

TECHNICAL DETAILS		APPLICATION AREA	DESCRIPTION
Body:	aluminium anodised or stainless steel	<p>The precision pressure regulator FR1 is used particularly in the following areas:</p> <ul style="list-style-type: none"> <li>• Gas analysis</li> <li>• Gas chromatography</li> <li>• Instrumentation</li> <li>• Process engineering</li> <li>• Metallurgy</li> <li>• Laboratory applications</li> <li>• mbar applications</li> </ul>	<p>The FR 1 is a single-stage precision pressure regulator with balanced main valve.</p> <p>The FR 1 is for installation in piping systems, for installation in control panels or for integrating in instruments (instrumentation).</p> <p>The Integrated balanced poppet ensures that even when inlet pressure drops down a constant operating pressure is guaranteed (dual stage effect).</p> <p>An easily replaceable sinter metal filter element is integrated into the pressure regulator as standard.</p>
Valve seat:	stainless steel		
Gaskets:	viton / NBR		
Diaphragm:	viton / NBR / stainless steel		
Max. inlet pressure:	12 bar		
Outlet pressure range:	50 mbar - 7,0 bar		
Operating temp.:	-20 to +70°C		
Dimensions:	106 x 48 mm		
Weight:	240 g		
Threads:	in- / outlet NPT 1/8" f		

## QUALITY STANDARD

The company Hornung is certified to **DIN EN ISO 9001** and **ISO 14001:2009**. All single parts are manufactured, assembled and tested by in-house production. The finished parts are therefore under all criteria of German quality control with 100% final inspection.

# HORNUNG

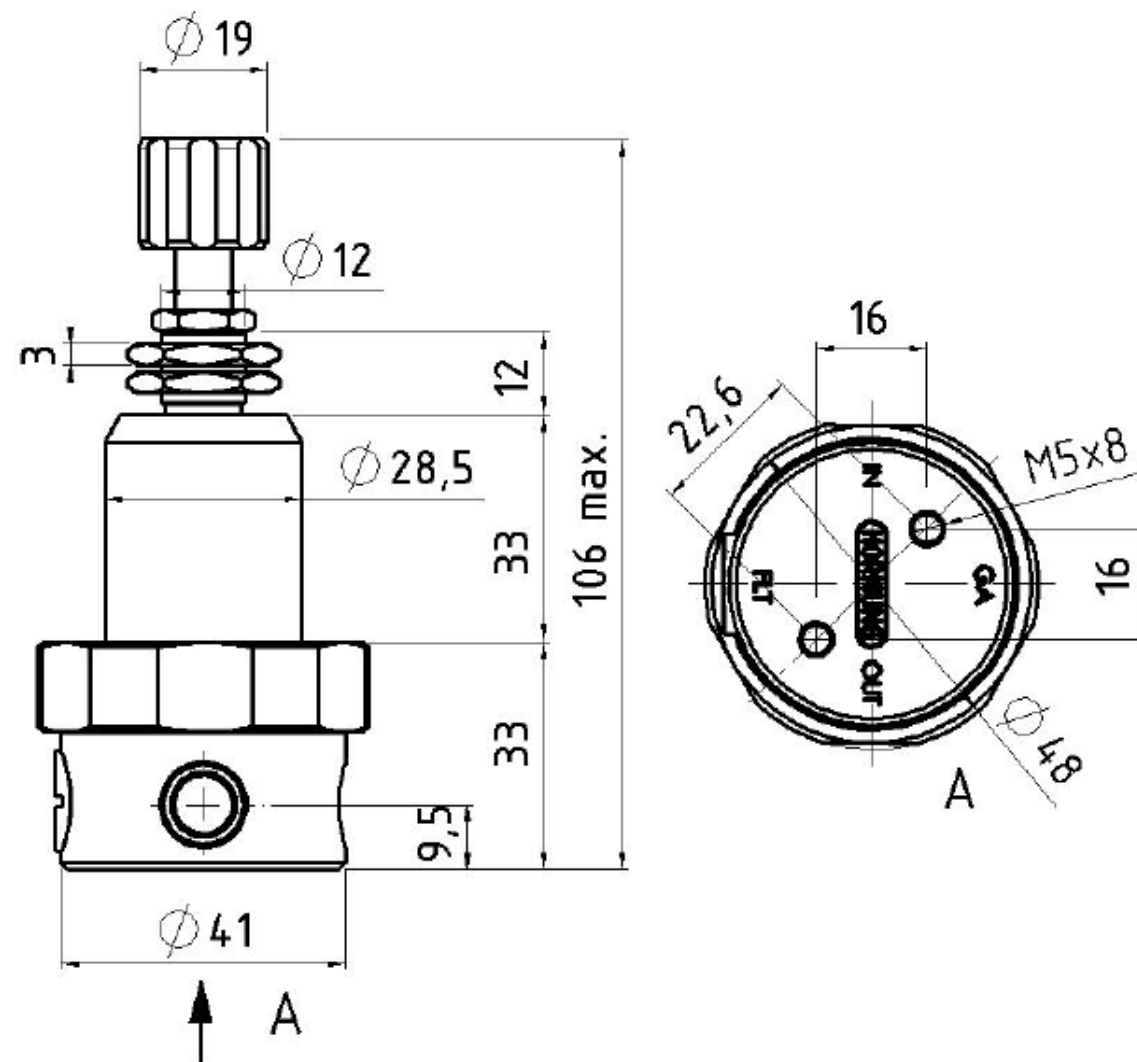
Präzision made in Germany

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63263 Neu-Isenburg

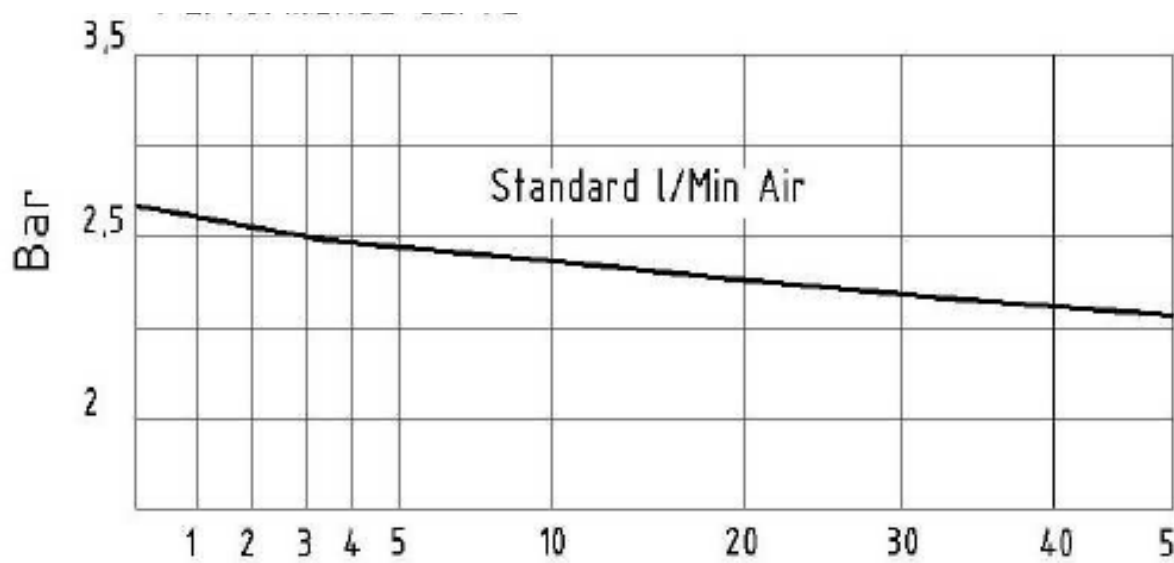
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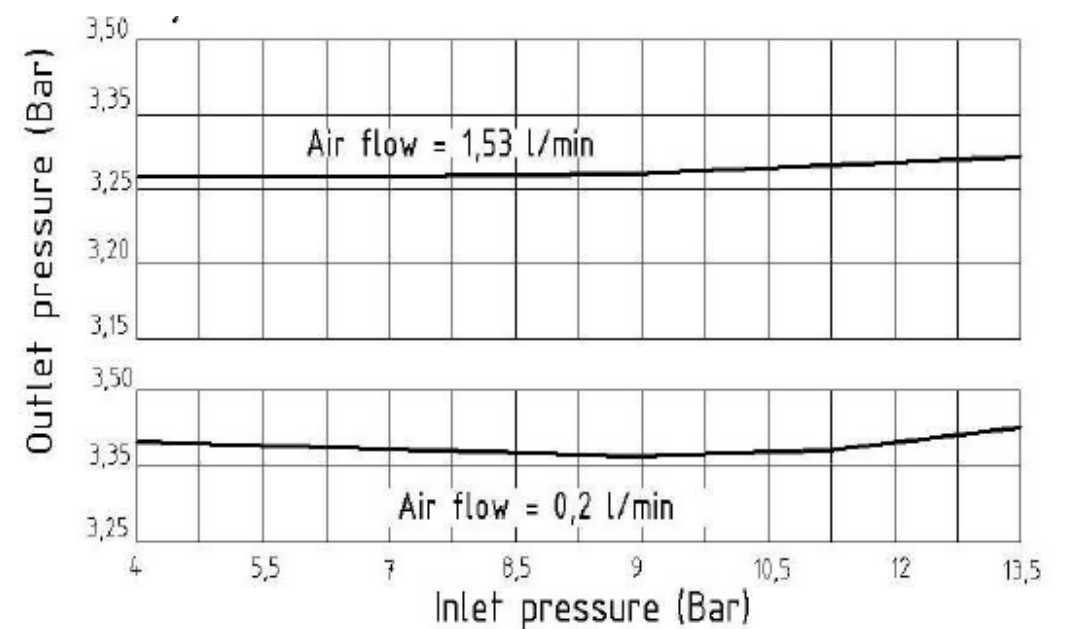
# FR 1



## PERFORMANCE CURVE



## FLOW DIAGRAM



## ORDER DETAILS

Material:	Diaphragm:	Gaskets:	Gauge:	Pressure ranges:
1 = aluminium	1 = NBR	1 = NBR	0 = none	1 = up to 170 mbar
2 = stainless steel (1.4404)	2 = viton	2 = viton	1 = outlet gauge	2 = up to 350 mbar
	3 = stainless steel (1.4435)			3 = up to 500 mbar
	4 = hastelloy (2.4610)			4 = up to 700 mbar
				5 = up to 2,1 bar
				6 = up to 4,2 bar
				7 = up to 7,0 bar

Regulator type	27-	2	3	2	1	4	Gas type
27	FR 1	Type	Material	Diaphragm	Gaskets	Gauge	Pressure

Accessories: See total catalogue segment

7. Gauges, compression fittings and accessories  
9. Console