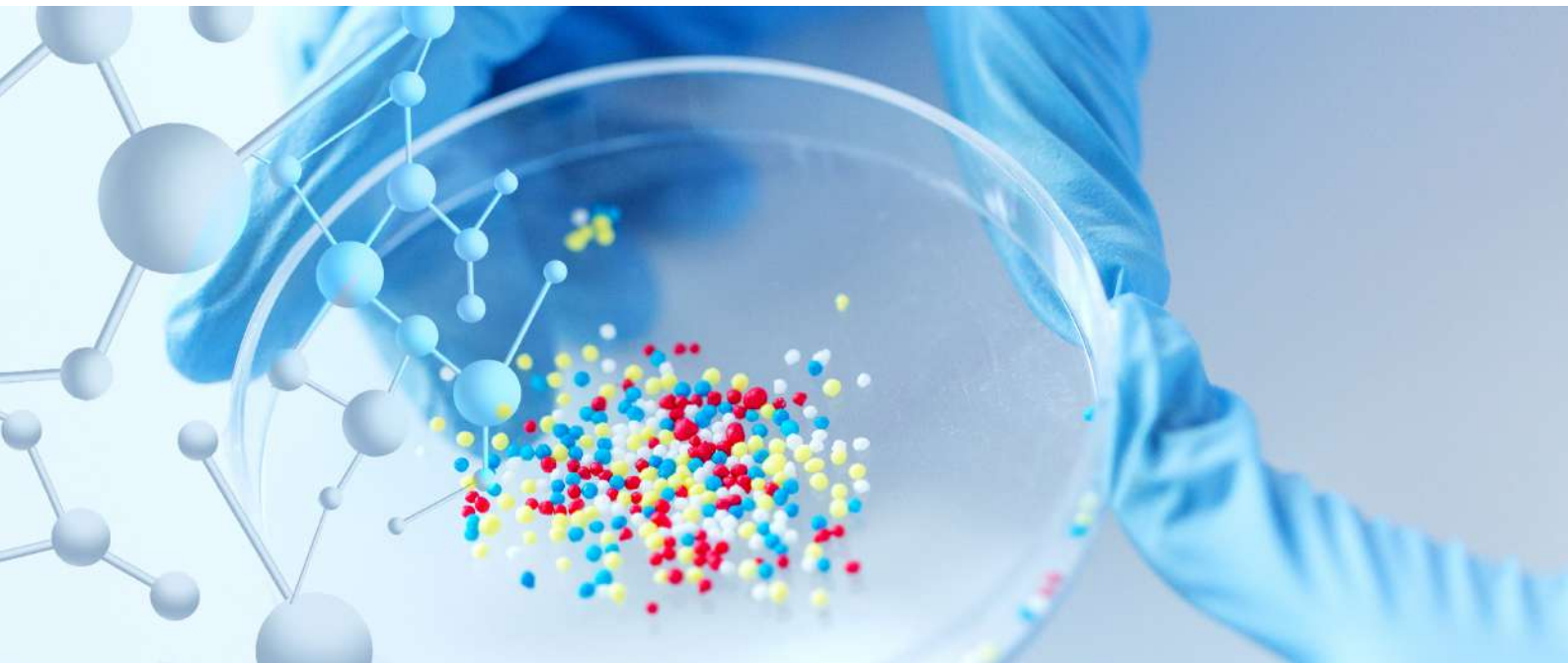


# GSA Air Dryers

## HYF-A(N) series

Compressed air filters

*Global Standard Air & Gas*



# A Filter Designed to Remove Impurities in Compressed Air

## Importance of Quality of Compressed Air



Compressed air contains are found oil aerosol, vapor, diverse fine particulates and condensate. Using such contaminants without being filtered by a proper method may cause a problem in manufacturing equipment or processes or result in decrease in product quality or product defect. Try to enhance work efficiency and productivity with compressed air which meets international quality standards after the use of high-quality, high-efficiency GSA filters.

Install proper particulate, coalescing and carbon filters according to the quality of compressed air.



Before

After

ISO8573-1-2010 CLASS	Compressed Air Quality Level			Vapour Pressure Dew Point °C at 7 barg	Total Oil mg/m <sup>3</sup>
	Maximum number of particles per m <sup>3</sup>				
	0.1~0.5 micron	0.5~1.0 micron	1.0~5.0 micron		
1	20,000	400	10	-70	0.01
2	400,000	6,000	100	-40	0.1
3	-	90,000	1,000	-20	1
4	-	-	10,000	3	5
5	-	-	100,000	7	-
6	-	-	-	10	-

## Filter Installation according to Quality of Compressed Air (Recommended)



## Safe and Easy Maintenance



The bayonet connection structure enables filter assembly/disassembly without a special tool. It is also easy to assemble the element, ensuring safe and easy maintenance.

Since easy assembly/disassembly and maintenance are enabled in a minimum installation space, any inconvenience resulting from spatial constraints is minimized.

# Features and Advantages of Filter



Cross-sectional View

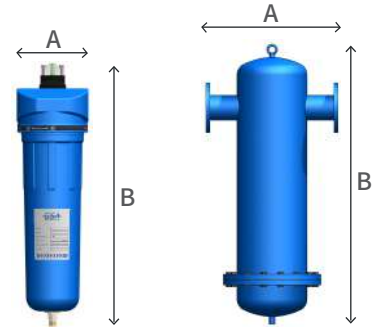
- 1 Differential Pressure Indicator**  
Able to check when the element should be replaced easily with a differential pressure indicator
- 2 Easy Element Replacement**  
Patented radial element; easy to install and remove
- 3 Simple Assembly**  
A patented bayonet connection type; easy to assemble/disassemble without a special tool; convenient repair & maintenance
- 4 Pleated Type**  
High reliability and great filtering efficiency with a multilayered structure; pleated design, slowing down the flow of compressed air; minimizes pressure loss
- 5 Aluminum Die Casting**  
Light and highly airtight in aluminum die casting design
- 6 Anodizing Surface Treatment**  
Durable and anti-corrosion with anodizing surface treatment; prevents float drain malfunction caused by corrosion
- 7 External Auto Drain**  
Prevents float malfunction with float-mounted auto drain; easy maintenance
- 8 Auto/Manual Float Drain**  
Easy maintenance with auto & manual float drain

Particle Filter Element	Oil Filter Element
<p>GSA particle filters have great filtration efficiency with a uniform and dense particle size, compared to rival products.</p> <div style="display: flex; justify-content: space-around; align-items: center;">  <div style="text-align: center;">  <p>GSA</p> </div> <div style="text-align: center;">  <p>Rival</p> </div> </div>	<p>In 4-layer structure, a GSA oil filter is able to filter oil and particles with great oil-water separation capacity.</p> <div style="display: flex; align-items: center;">  <div style="margin-left: 20px;">  <ul style="list-style-type: none"> <li>← Step I. Inner Core Filter</li> <li>← Step II. Oil-removing Microfiber</li> <li>← Step III. Ultrafine Micro Filter Paper</li> <li>← Step IV: Water</li> </ul> </div> </div>

## Technical Specification

### References

- Inlet Air Pressure : 7.0 barg
- Design Pressure : 14 barg(50AN or lower) / 9.7 barg(65A or higher)
- Maximum Operating Temperature for Elements : 40/5 µm(Max.65 C), 1/0.1/0.01 ppm(Max.54 C)
- Materials used under particular pressure or those made with stainless steel are custom-made.
- A filter support should be HYF-125A or higher.
- Filter Nomenclature
  - Filter Model : HYF-40-15AN(Filter – Filtration Rate – Connection)
  - Element Model : HYE-40-15AN(Element – Filtration Rate – Connection)
- ‘HYE - XX - 50A (bolt)’ applies for HYF-65A or higher models. The quality can vary depending on each model. Please check quantity before placing an order.



### Filter Element

Model	Particle Removal	Oil Removal (@ 20°C)	Maximum Operating Temperature °C	Differential Pressure(barg)		Differential Pressure Indicator (Element Replacement)		Element		
				Dry	Wet	DPI Color	Month	Color	Material	
HYE	40	40 Micron	-	65	0.05	0.15	RED	6	White	Polyethylene
	5	5 Micron	-		0.05	0.15			White	Polyethylene
	1	1 Micron	1 ppm	54	0.15	0.3			Red	Borosilicate
	0.1	1 Micron	0.1 ppm		0.15	0.3			White	Borosilicate
	0.01	1 Micron	0.01 ppm		0.15	0.3			Yellow	Borosilicate
	0.003	-	0.003 ppm		0.1	0.2			White	Activated Carbon

### Filter

Model	Flow Rate		Maximum Operating Pressure barg	Connection	Element Quantity	Dimensions (A x B) mm	Weight kg	
	Nm³/min	CFM						
HYF	15AN	0.8	28	13	PT 15A	1	85 x 185	0.8
	20AN	1.7	60		PT 20A	1	85 x 225	1
	25AN	3.4	120		PT 25A	1	105 x 330	1.9
	40AN	10	353		PT 40A	1	165 x 440	5.5
	50AN	14	494		PT 50A	1	165 x 540	6.5
	65A	28	989	9.7	FLG. 65A	2	550 x 1143	88
	80A	42	1483		FLG. 80A	3	550 x 1143	103
	100A	70	2472		FLG. 100A	5	600 x 1180	120
	125A	84	2966		FLG. 125A	6	700 x 1251	170
	150A	112	3955		FLG. 150A	8	700 x 1251	180
	200A	196	6922		FLG. 200A	11	1000 x 2367	300
	250A	330	11654		FLG. 250A	19	1200 x 2705	400

### High-pressure Filter

Model	Flow Rate		Maximum Operating Pressure barg	Connection	Element Quantity	Dimensions (A x B) mm	Weight kg	
	Nm³/min	CFM						
HYF	15H	1	35	35.0	PT 15A	1	106 x 340	17
	20H	1.9	67		PT 20A	1	106 x 390	19
	25H	3.4	120		PT 25A	1	106 x 510	21
	40H	10	353		PT 40A	1	144 x 700	25
	50H	14	494		PT 50A	1	185 x 925	28