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ITALY

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TECNOCRYO'S BRANCHES IN THE WORLD:

FRANCE

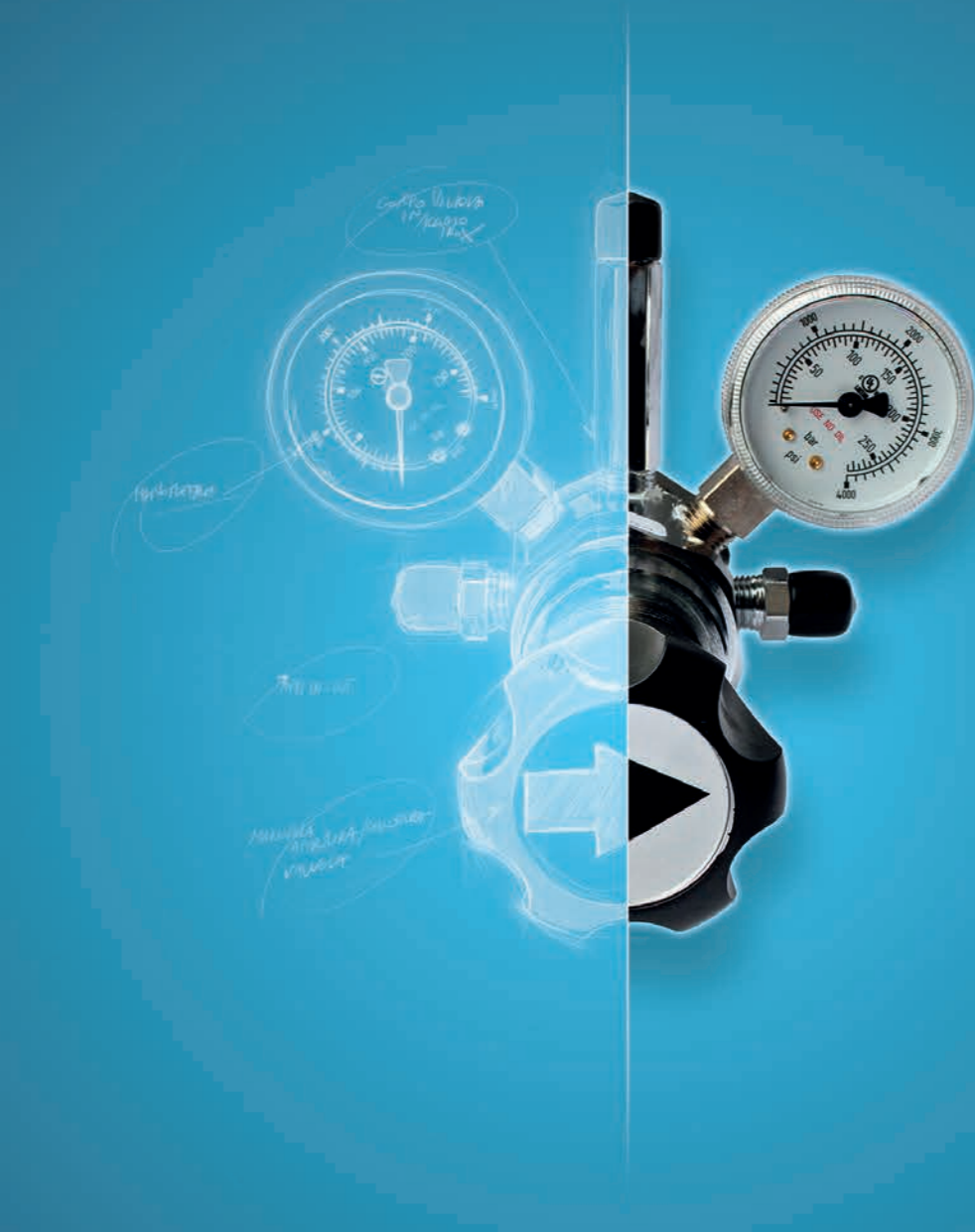
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our expertise, your world

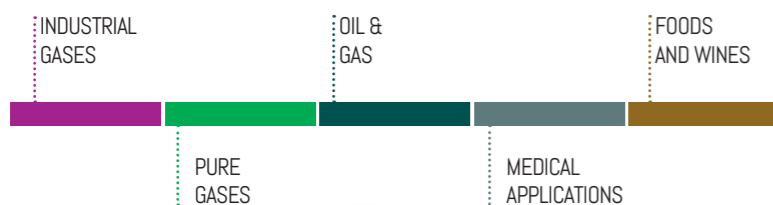
20
18
CATALOGO | CATALOGUE



OIL & GAS
SECTION

18
CATALOGO | CATALOGUE

WE ARE HERE IN THE WORLD



www.tecnocryo.com

HISTORY

Tecnocryo Spa is an entirely Italian company established in the '90s and based in an important industrial complex in the province of Milan. Originally established as a **manufacturer and repairer** of installations for the production of technical gases and the filling of cylinders during both the gaseous and liquid phase, TECNOCRYO eventually developed the need to support the design and construction of equipment for gas decompression **and distribution** of industrial, pure **and cryogenic** gases, eventually stepping **in the OIL & GAS industry** where the company has become an important player during the last decade. TECNOCRYO, thanks to a highly specialized technical staff, which **makes use of the best design and 3D modeling systems**, offers 360-degree solutions in the areas in which it operates. The know-how acquired over the years, **as well as a fully stocked warehouse**, allow TECNOCRYO to offer and guarantee the best solutions **to meet customer requirements**. In addition to manufacturing, we are able to provide engineering consulting for complete plants, skid or studies to

TECNOCRYO

create customized equipment. We have an important welding department with highly qualified personnel. **Our personnel are skilled and certified** in the use of the materials we use such as, brass, copper and AISI 316 stainless steel. This allows us to make customized equipment, provided with flanged and Tri-Clamp connections. For years now we have been a leading company in the world's engineering and chemical industries, in the extraction of crude oil and gas, pharmaceutical sector, food sector with a focus in the wine and oil industry, medical facilities etc.



Our products are made in accordance with the UNI EN ISO 9001: 2008 for quality management system. Some of our products have achieved the BAM certification and certified adiabatic decompression for use with oxygen. Our catalog includes ATEX certified products. A sophisticated TEST laboratory allows us to test every single device, thus giving our products a high level of reliability.



OIL & GAS

OIL & GAS

our expertise, your world

TECNOCRYO RELIES ON A HIGH QUALITY SYSTEM WHICH COMPLETELY MERGES WITH THE ENGINEERING AND MANUFACTURING FACILITIES, PURSUING A STRATEGY OF CONTINUOUS IMPROVEMENT WITHIN A MOVING MARKET OF HIGH TECHNOLOGY.

SEZIONE | SECTION

3

SERIE IN ACCIAIO INOX

STAINLESS STEEL SERIES

DESIGNED AND CONSTRUCTED FOR HEAVY-DUTY APPLICATIONS



SEZIONE | SECTION 3

PRESSURE REGULATOR

Stainless steel



100 BAR

OPTIONAL

TCR 100 | STANDARD SERIES FROM 1/4" TO 3/8", 100 BAR

Pressure Regulators made of stainless steel 316 L designed and manufactured for heavy-duty applications. Control system with convoluted diaphragm for the best stability and precision. Balanced poppet-valve (shutter) to keep the outlet pressure almost constant and independent from fluctuation of inlet pressure. Self-relieving execution for exhausting over-pressure, just for compressed air application. Outlet pressure range till to 50 bar. Adjusting by screw with hex. head. Including two gauges for inlet and outlet pressure. Special version (i.e. no self-relieving for gases and liquid) on request.

Important: upstream filter is strictly recommended.

APPLICATIONS:

- Pharmaceutical industry;
- Chemical industry;
- Oil & gas and Off Shore applications;
- Food industry;

FEATURES:

- Particular attention to the low level of roughness of surfaces, to grant high standard of cleaning;
- Compatible for use in aggressive environment;
- Suitable for extreme temperatures (-60°C), critical environments, hazardous applications;
- Suitable to be cleaned and sanitized by the most common processes;

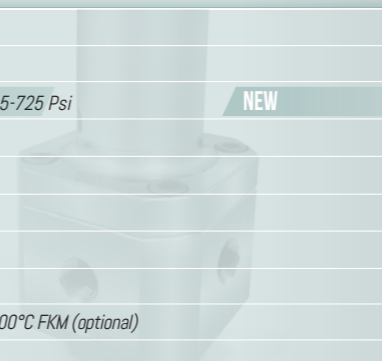
MATERIALS

Body, bonnet	316L stainless steel
Seals	NBR - EPDM - FKM - Silicone
Diaphragm	NBR - EPDM - FKM - Silicone
Internal parts	316L stainless steel
Shutter	PU - NBR - EPDM - FKM - Silicone

TECHNICAL DATA

Port thread	1/4" BSPP F - 1/4" NPT F / 3/8" BSPP F - 3/8" NPT F
P. max Inlet	100 Bar (50 bar Temp>80°C)
Range outlet pressure	0.3-3 / 0.5-8 / 0.5-17.2 / 2.5-25 / 5-50 Bar / 4.4-44 / 7.2-116 / 7.2-250 / 36-362 / 72.5-725 Psi
Gauge connections	1/4" BSPP F - 1/4" NPT F
Self-relieving port	1/8" Gas F
Flow rate *)	290 Nm ³ /h - 4800 dm ³ /min
Kv*)	Kv = 2.12 Nm ³ /h (EN 60534)
Weight	1.9 kg/4.1lb
Working temp.	-25°C to +110°C (HNBR) / -50°C to +130°C (EPDM) -60°C to +230°C (Silicone) / -20°C +200°C FKM (optional)
Conformity to Directives	94/9/EC ATEX - ASTM A182 Nace MR0.175 - 97/23/EC PED

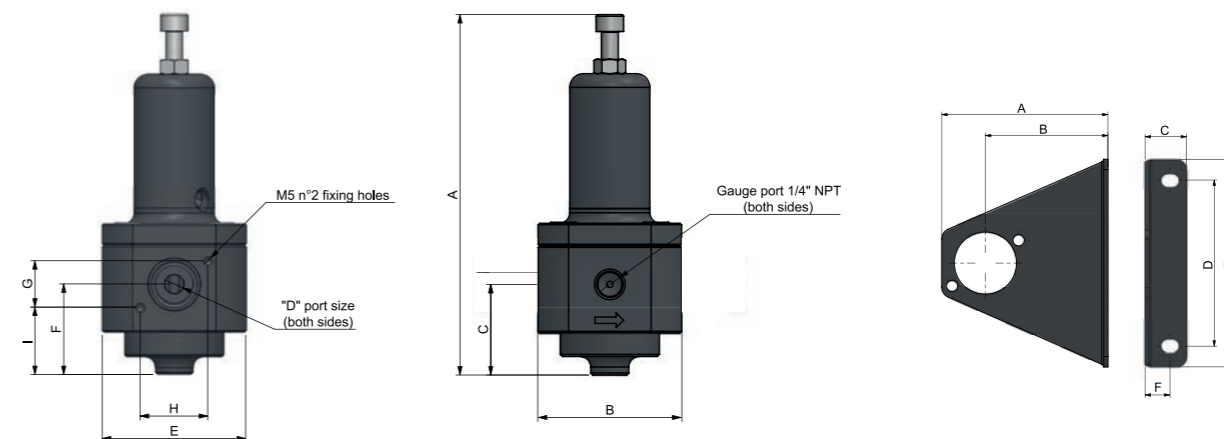
*) P_{IN} 10bar, P_{OUT} 6.3bar, ΔP 1bar



PRESSURE REGULATOR

Stainless steel

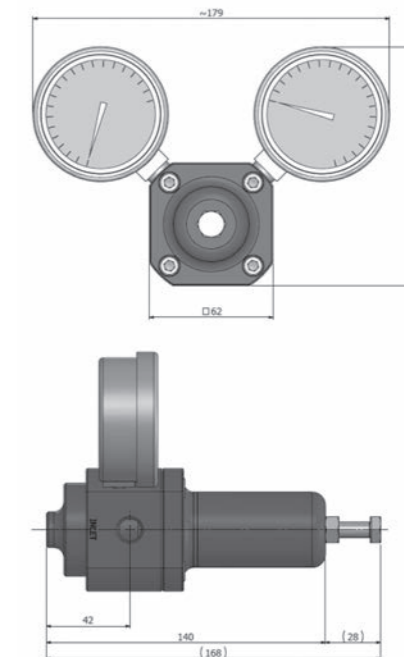
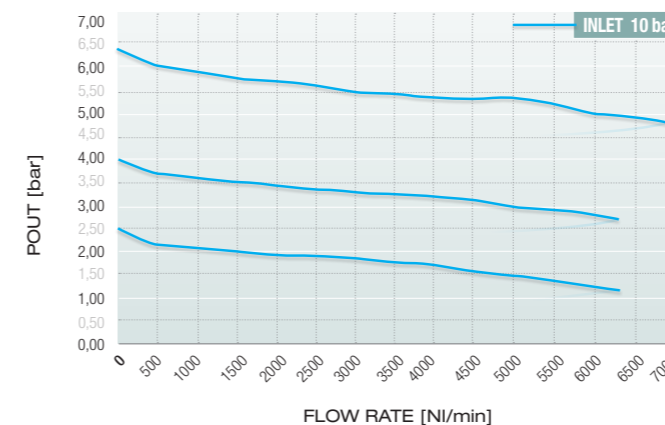
DESIGNED AND CONSTRUCTED FOR HEAVY-DUTY APPLICATIONS



SIZE	A	B	C	D	E	F	G	H	I
1/4"-3/8"	160	62	42	1/4"	62	42	28	28	31

SIZE	A	B	C	D	E	F
1/4"-3/8"	80	59	20	80	100	12

FLOW RATE



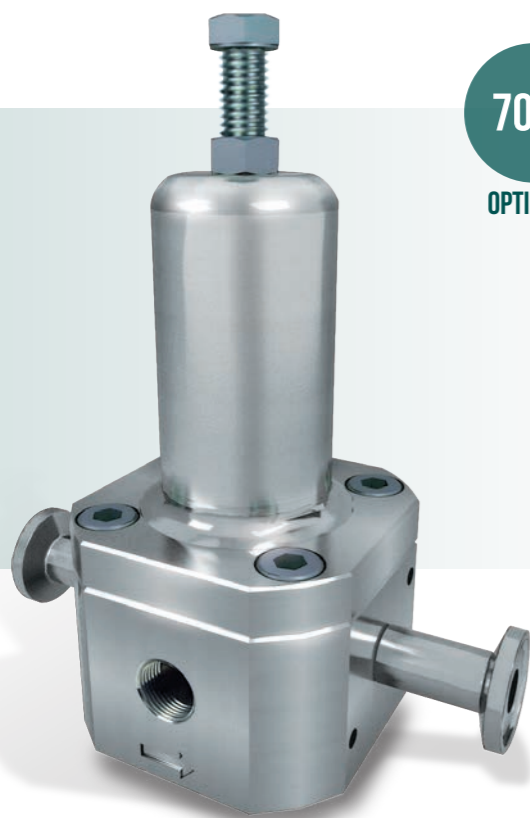
OPTIONALS

- Flanges (EN1092-1/ANSI) • Without relieving • Dome loaded version • Tri-Clamp Connections • Threaded hole for connecting gas on bonnet
- FDA Certification

NOTE

PRESSURE REGULATOR

Stainless steel



70 BAR

OPTIONAL

TCR 60 | STANDARD SERIES
FROM 1/4" TO 3/4", 60 BAR

Pressure Regulators made of stainless steel 316 L designed and manufactured for heavy-duty applications. Control system with convoluted diaphragm for the best stability and precision. Balanced poppet-valve (shutter) to keep the outlet pressure almost constant and independent from fluctuation of inlet pressure. Self-relieving execution for exhausting over-pressure, just for compressed air application. Outlet pressure range till to 50 bar (725 psi). Adjusting by screw with hex. head. Connections for outlet pressure gauge on both the sides. Special version (i.e. no self-relieving for gases and liquid) on request.

Important: filter upstream the press. reg. is strictly recommended

APPLICATIONS:

- Pharmaceutical industry;
- Chemical industry;
- Oil & gas and Off Shore applications;
- Food industry;

FEATURES:

- Particular attention to the low level of roughness of surfaces, to grant high standard of cleaning;
- Compatible for use in aggressive environment;
- Suitable for extreme temperatures (-60°C), critical environments, hazardous applications;
- Suitable to be cleaned and sanitized by the most common processes;

MATERIALS

Body, bonnet	316L stainless steel
Seals	NBR - EPDM - FKM - Silicone
Diaphragm	NBR - EPDM - FKM - Silicone
Internal parts	316L stainless steel
Shutter	PU - NBR - EPDM - FKM - Silicone

TECHNICAL DATA

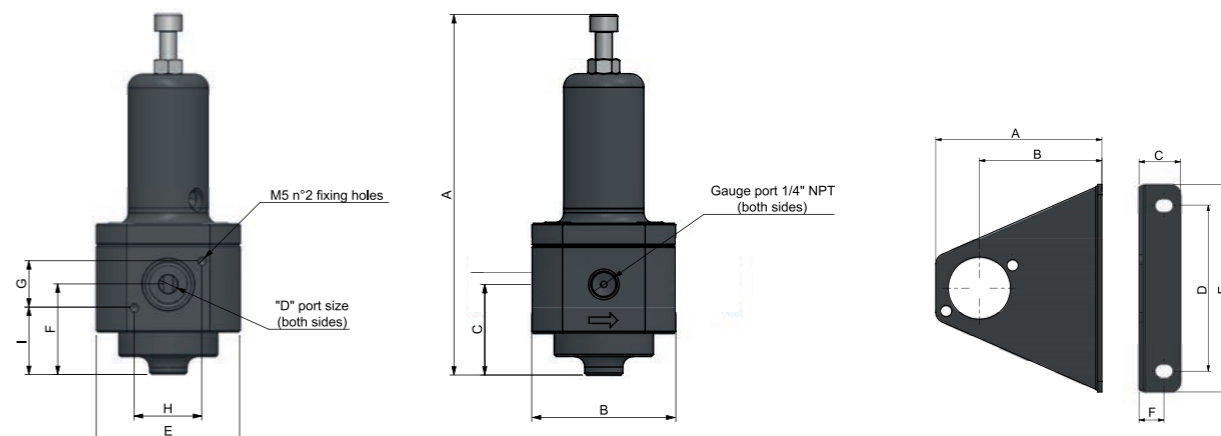
	1/4" - 3/8"	1/2" - 3/4" L
Port thread	1/4" - 3/8" BSP F; 1/4" - 3/8" NPT F	1/2" - 3/4" BSP F; 1/2" - 3/4" NPT F
P. max Inlet	60 Bar (50 bar Temp>80°C) Optional version TCR7 70 BAR	60 Bar (50 bar Temp>80°C) Optional version TCR7 70 BAR
Range outlet pressure	0.3-3 / 0.5-8 / 0.5-17.2 / 2.5-25 / 5-50 Bar 4.4-44 / 7.2-116 / 7.2-250 / 36-362 / 72.5-725 Psi NEW	
Gauge connections	1/2" BSP F - 1/4" NPT F	
Self-relieving port	M6	M6
Flow rate *)	290 Nm ³ /h - 4800 dm ³ /min	370 Nm ³ /h - 6166 dm ³ /min
Kv*)	Kv = 2.12 Nm ³ /h (EN 60534)	
Weight	1.6kg/3lb	2.3kg/5lb
Working temp.	-25°C to +110°C (HNBR) / -50°C to +130°C (EPDM) / -60°C to +230°C Silicone / -20°C +200°C FKM (optional)	
Conformity to Directives	94/9/EC ATEX - ASTM A182 Nace MR0.175 - 97/23/EC PED	

*) P_{IN} 10bar, P_{OUT} 6.3bar, ΔP 1bar

PRESSURE REGULATOR

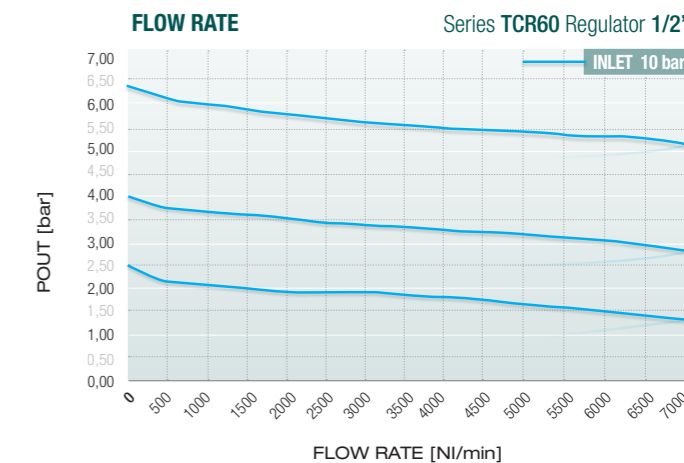
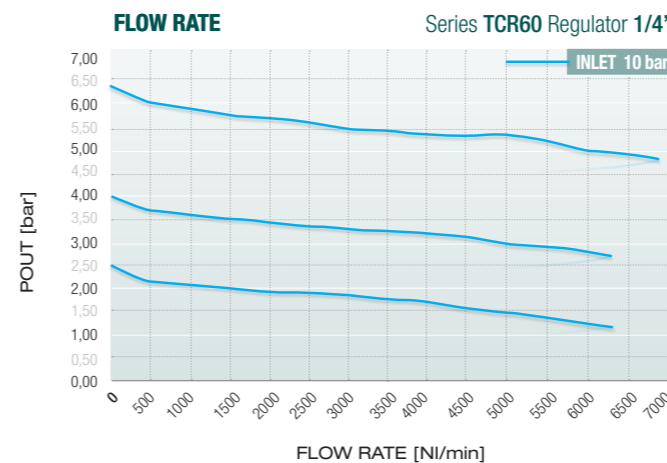
Stainless steel

DESIGNED AND CONSTRUCTED FOR HEAVY-DUTY APPLICATIONS



SIZE	A	B	C	D	E	F	G	H	I
1/4"	163	60	41	1/4"	60	41	28	28	31
1/2"-3/4"	166	68	43	163	68	43	22	32	32
3/4" L	179	68	47	1/2"-3/4"	68	47	22	32	32

SIZE	A	B	C	D	E	F
1/4"	80	59	20	80	100	12
1/2"-3/4"	80	59	20	80	100	12



OPTIONALS

- Bracket • Gauge • Flanges (EN1092-1 / ANSI) • Tri-Clump connections • Without reliving • Dome loaded version • Oring Kalrez®
- Threaded connection for exhausting gas on bonnet • FDA Approval

NOTE

PRESSURE REGULATOR

Stainless steel



70 BAR

OPTIONAL

TCR 60 | "PHARMA" SERIES
FROM 1/4" TO 1.1/2"

Pressure Regulators for LIQUIDS and GASES made of stainless steel 316 L, designed and manufactured for Pharmaceutical industries and Biotechnological applications. Control system with membrane convolved for best stability and precision. Balanced poppet-valve (shutter) to keep outlet pressure almost constant and independent from fluctuation of inlet pressure.

DESIGN FOR CIP AND SIP CYCLES.

Self-relieving execution for exhausting over-pressure, just for compress air service. Outlet pressure range till to 17.2 bar (250 psi). Adjusting by screw hex head. Special version (i.e. without self relieving for gases and liquid) on request. The pressure gauge can be mounted on both sides. **Important:** upstream filter is strictly recommended.

APPLICATIONS:

- Pharmaceutical industry;
- Chemical industry;
- Oil & gas and Off Shore applications;
- Food industry;

FEATURES:

- Particular attention to the low level of roughness of surfaces, to grant high standard of cleaning;
- Compatible for use in aggressive environment;
- Suitable for extreme temperatures (-60°C), critical environments, hazardous applications;
- Suitable to be cleaned and sanitized by the most common processes;

MATERIALS

Body, bonnet	316L stainless steel (1.4404)
Seals	EPDM - Silicone - VITON
Diaphragm	NBR - EPDM - FKM - Silicone
Internal parts	316L stainless steel (1.4404)
Shutter	EPDM - Silicone

TECHNICAL DATA

1/4" - 1/2" - 3/4" - 1" - 1.1/2"

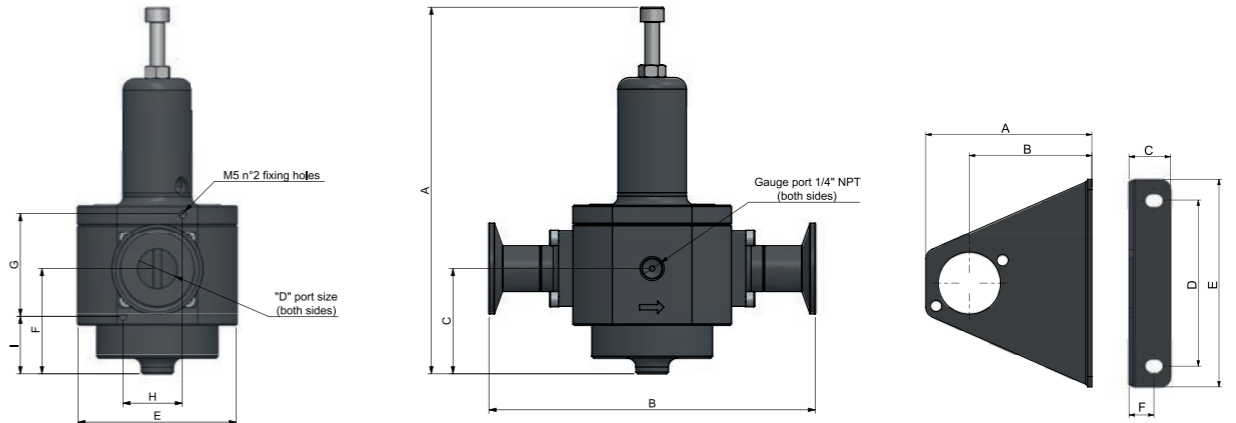
Port thread	TC ASME BPE - TC DIN32676 - ISO1127-1 In linea/Inline pattern		
P. max Inlet	60 Bar - 870 psi (50 bar Temp>80°C) Optional version TCR7 70 BAR		
Range outlet pressure	0.3-3 / 0.5-8 / 0.5-17.2 Bar 44-44 / 7.2-116 / 7.2-250 psi		
Roughness	≤0,5µm		
Soft Seat leaking rate	ANSI Classe VI		
Flow rate *)	290 Nm3/h - 4800 dm3/min		
Kv*)	Kv = 2.12 Nm3/h (EN 60534)		
Weight	1.80kg (1/4")	240kg (1/2"-3/4")	3.7kg(1"-1.1/2")
Working temp.	- 60°C to +230°C Silicone		
Conformity to Directives	CE 94/9/EC ATEX - ASTM A182 Nace MR0.175 - 97/23/EC PED - FDA		

*) P_{IN} 10bar, P_{OUT} 6.3bar, ΔP 1bar

PRESSURE REGULATOR

Stainless steel

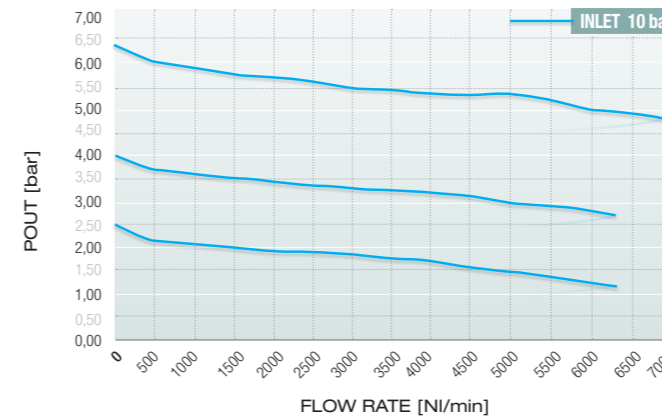
DESIGNED AND CONSTRUCTED FOR HEAVY-DUTY APPLICATIONS



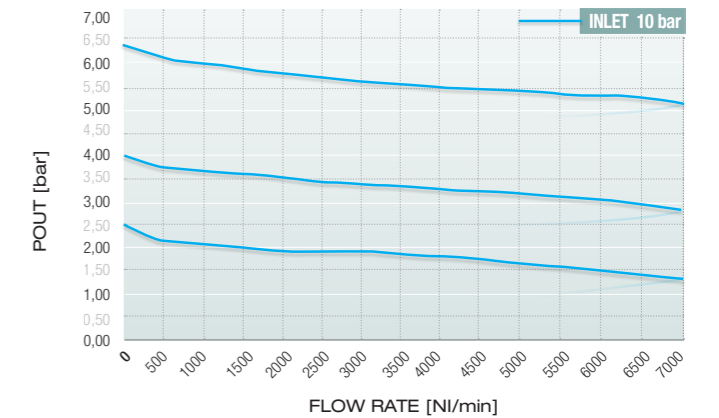
SIZE	A	B	C	D	E	F	G	H	I
1/4"	163	1174	41	1/4"	60	41	28	28	31
1/2"-3/4"	166	1254	43	1/2"-3/4"	68	43	22	32	32
1"-3/4"	204	1814	59	3/4"-1"	88	59	57	33	32
1.1/2"	204	1454	59	1.1/2"	88	59	57	33	32

SIZE	A	B	C	D	E	F
1/4"	80	59	20	80	100	12
1/2"-3/4"	80	59	20	80	100	12
3/4"-1-1/2"	88	59	20	80	100	12

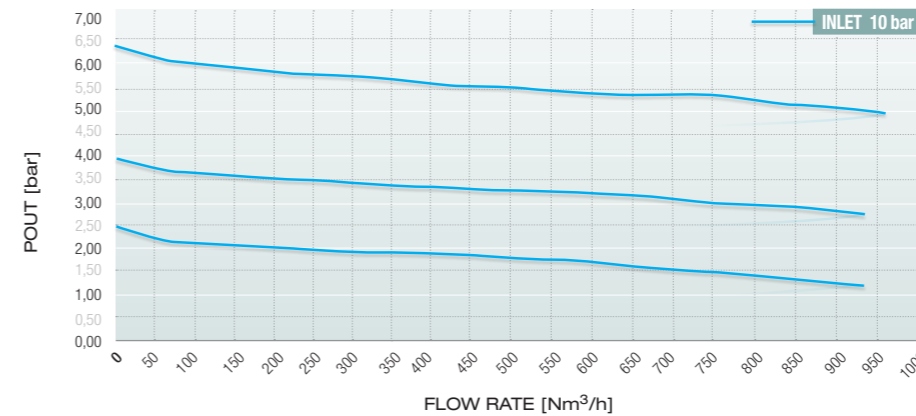
FLOW RATE Series TCR60 Regulator 1/4"



FLOW RATE Series TCR60 Regulator 1/2"



FLOW RATE Series TCR60 Regulator 1" - 1.1/2"



OPTIONALS

- Bracket • Oring Kalrez® • Self Relieving for Air
- TRICLAMP ISO1127-1 DIN32676 • Threaded connection for exhausting gas on bonnet
- Dome loaded execution • ATEX Release

NOTE

PRESSURE REGULATOR

Stainless steel



TCR 6 | STANDARD SERIES FROM 3/4" TO 1", 60 BAR

Pressure Regulators made of stainless steel 316 L designed and manufactured for heavy-duty applications. Control system with convoluted diaphragm for the best stability and precision. Balanced poppet-valve (shutter) to keep the outlet pressure almost constant and independent from fluctuation of inlet pressure. Self-relieving execution for exhausting over-pressure, just for compressed air application. Outlet pressure range till to 50 bar (725 psi). Adjusting by screw with hex. head. Connections for outlet pressure gauge on both the sides Special version (i.e. no self-relieving for gases and liquid) on request. **Important:** filter upstream the press. reg. is strictly recommended

APPLICATIONS:

- Pharmaceutical industry;
- Chemical industry;
- Oil & gas and Off Shore applications;
- Food industry;

FEATURES:

- Particular attention to the low level of roughness of surfaces, to grant high standard of cleaning;
- Compatible for use in aggressive environment;
- Suitable for extreme temperatures (-60°C), critical environments, hazardous applications;
- Suitable to be cleaned and sanitized by the most common processes;

MATERIALS

Body, bonnet	316L stainless steel
Seals	NBR - EPDM - FKM - Silicone
Diaphragm	NBR - EPDM - FKM - Silicone
Internal parts	316L stainless steel
Shutter	PU - NBR - EPDM - FKM - Silicone

TECHNICAL DATA

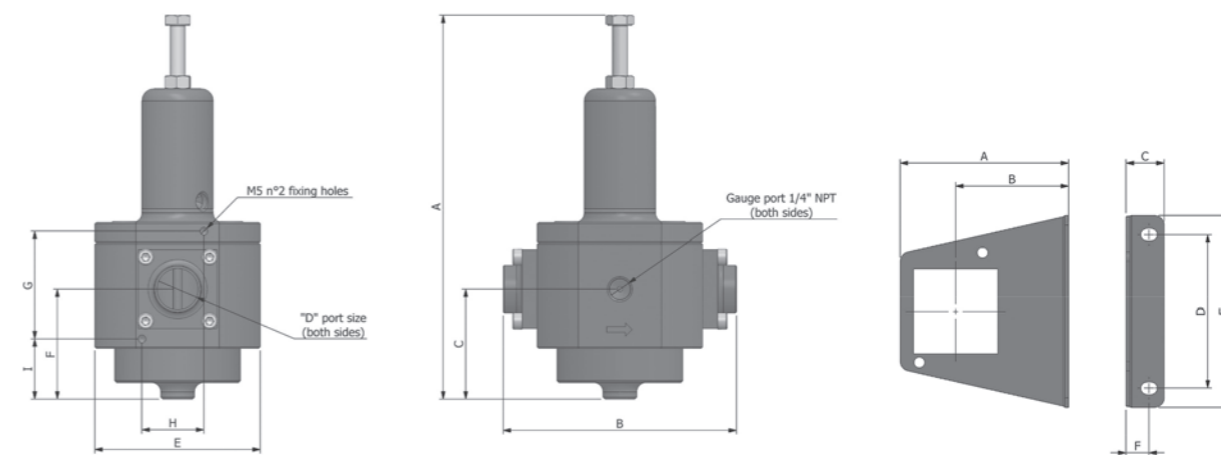
	3/4"	1"
Port thread	3/4" BSPP F - 3/4" NPT F	1" BSPP F - 1" NPT F
P. max Inlet	60 Bar (50 bar Temp > 80°C)	
Range outlet pressure	0.3-3 / 0.5-8 / 0.5-17.2 / 2.5-25 / 5-50 Bar 4.4-44 / 7.2-116 / 7.2-250 / 36-362 / 72.5-725 Psi NEW	
Gauge connections	1/4" BSP F - 1/4" NPT F	
Self-relieving port	1/8" GF	1/8" BSP F
Flow rate *)	290 Nm³/h - 4800 dm³/min	370 Nm³/h - 6166 dm³/min
Kv*)	Kv = 4.23 Nm³/h (EN 60534)	
Weight	1.6kg/3lb	2.3kg/5lb
Working temp.	-25°C to +110°C (HNBR) / -50°C to +130°C (EPDM) / -60°C to +230°C Silicone / -20°C +200°C FKM (optional)	
Conformity to Directives	94/9/EC ATEX - ASTM A182 Nace MR0.175 - 97/23/EC PED	

*) P_{IN} 10bar, P_{OUT} 6.3bar, ΔP 1bar

PRESSURE REGULATOR

DESIGNED AND CONSTRUCTED FOR HEAVY-DUTY APPLICATIONS

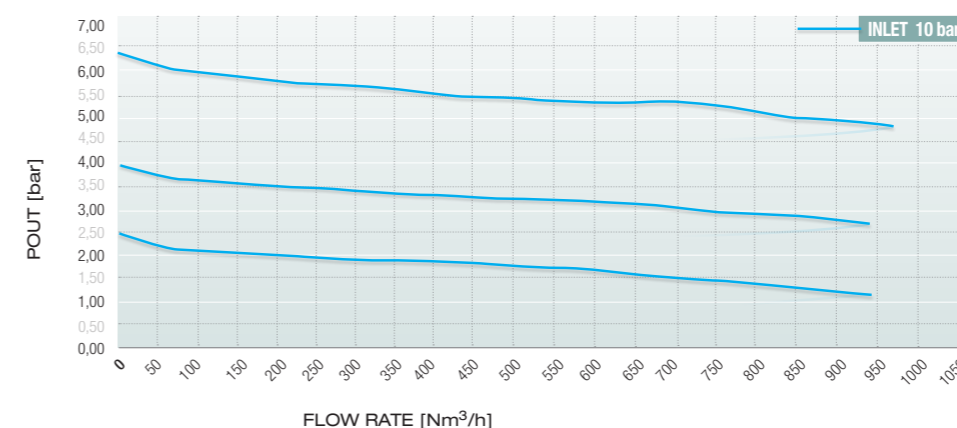
Stainless steel



SIZE	A	B	C	D	E	F	G	H	I
3/4"-1"	204	124	59	3/4"-1	88	59	57	33	32

SIZE	A	B	C	D	E	F
1/4"	88	59	20	80	100	12

FLOW RATE



OPTIONALS

- Bracket
- Gauge
- Flanges (EN1092-1 / ANSI)
- Without reliving
- Dome loaded execution
- Threaded connection for exhausting gas on bonnet

NOTE

PRESSURE REGULATOR

Stainless steel

520 BAR



LHP 8700 SS | HIGH PRESSION

The Model 8700SS is a single stage high pressure regulator that is designed to deliver high outlet pressures when used on high pressure cylinders up to 7500 PSIG. The Model GP 8700SS is suitable for:

- High pressure testing
- Charging accumulators
- Pressurizing aircraft strut

APPLICATIONS:

- Phammaceutical industry;
- Chemmical industry;
- Oil & gas and Off Shore applications;
- Foodd industry;

FEATURES:

- Particular attention to the low level of roughness of surfaces, to grant high standard of cleaning;
- Compatible for use in aggressive environment;
- Suitable for extreme temperatures (-60°C), critical environments, hazardous applications;
- Suitable to be cleaned and sanitized by the most common processes;

MATERIALS

Body	316L stainless steel
Bonnet	Chrome plated brass
Seals	Tenute metalliche
Diaphragm	Urethane - Neoprene for O2
Internal parts	316L stainless steel
Shutter	PCTFE (keF)
Filter	Sinterizzato acciaio inox/

TECHNICAL DATA

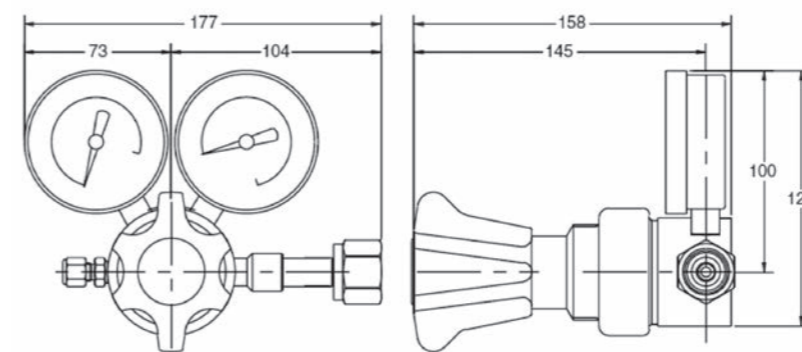
P. max Inlet	520 Bar /750 Psi
Range outlet pressure	1-200 / 0-300 / 0-400 Bar / 0-2900 / 0-4350 / 0-5800 Psi
Flow rate *)	100 Nm3/h
CV	0.08
Connections	1/4" NPT F - 1/2" NPT F
Weight	2,6 kg / 5,7 lb

*) P_{IN} 10bar, P_{OUT} 6.3bar, ΔP 1bar

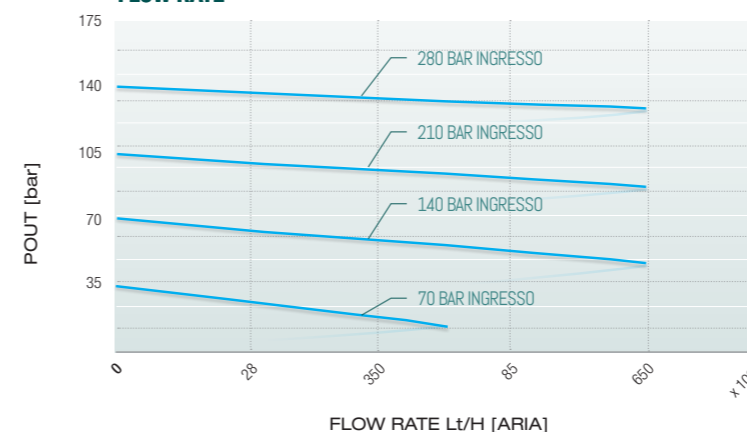
PRESSURE REGULATOR

DESIGNED AND CONSTRUCTED FOR HEAVY-DUTY APPLICATIONS

Stainless steel



FLOW RATE



OPTIONALS

- Panel Mount
- Inlet connection for cylinder UNI or different
- Flanges (EN1092-1 / ANSI)

NOTE

PRESSURE REGULATOR

Stainless steel

400 BAR



TCR 40X | HIGH PRESSION

Pressure regulator made of brass for high pressures and high flow rates. For models with outlet-pressure till 50 Bar, the control system is based on convoluted diaphragm, for a better stability and regulation; for models with output pressures higher than 50 bar, the system is controlled by piston. The balanced shutter keeps the outlet pressure almost constant and independent from fluctuation of inlet pressure. Designed for the most critical applications such as big distribution plants and fire-fighting systems.

APPLICATIONS:

- Phammaceutical industry;
- Chemmical industry;
- Oil & gas and Off Shore applications;
- Foodd industry;

FEATURES:

- Particular attention to the low level of roughness of surfaces, to grant high standard of cleaning;
- Compatible for use in aggressive environment;
- Suitable for extreme temperatures (-60°C), critical environments, hazardous applications;
- Suitable to be cleaned and sanitized by the most common processes;

MATERIALS

Body	316L stainless steel
Bonnet	316L stainless steel
Seals	HNBR - EPDM - SILICONE - FKM
Diaphragm	HNBR - EPDM - SILICONE - FKM
Internal parts	316L stainless steel
Shutter	PTFE FT10-02

TECHNICAL DATA

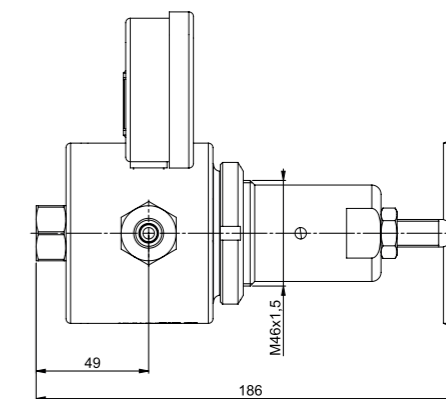
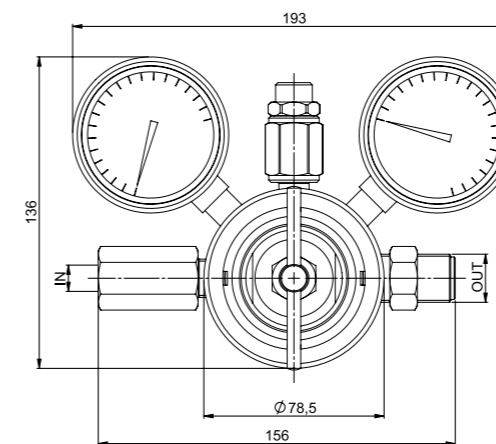
P. max Inlet	300 Bar optional 400 Bar
Range pressure out diaphragm	1,5-15 / 2,5÷25 / 5÷50 Bar
Range pressure out piston	20÷200 Bar optional 40-400 Bar
Inlet connections	¼" NPT F alternative bottle connections
Outlet connections	½" Gas M - ½" BSPP M
Flow rate	Membrana/Diaphragm ~ 500 Nm3/h Pistone/Piston ~ 700 Nm3/h
Weight	Membrana/Diaphragm 3,9 kg Pistone/Piston 4,1 kg
Working temp.	-20°C to +100°C*
Conformity to Directives	2014/68/EU PED

*In case of different range of temperature please contact our technical department

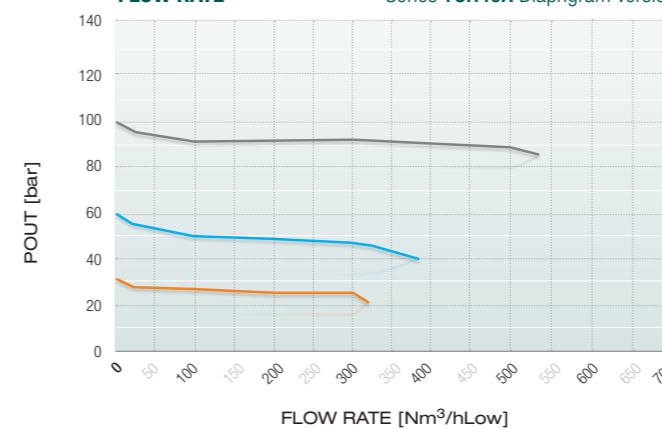
PRESSURE REGULATOR

Stainless steel

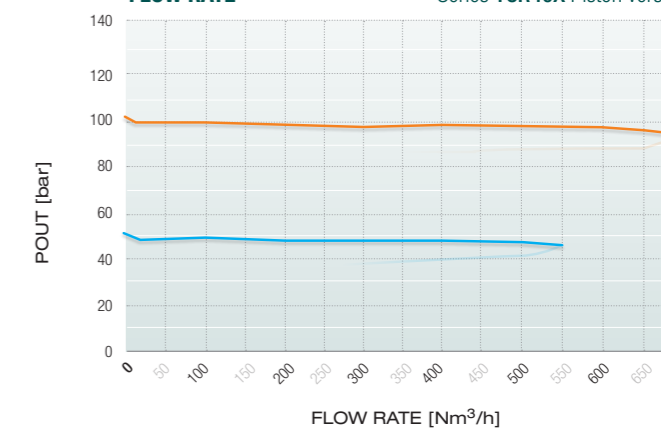
DESIGNED AND CONSTRUCTED FOR HEAVY-DUTY APPLICATIONS



FLOW RATE Series TCR40X Diaphragm version



FLOW RATE Series TCR40X Piston version



OPTIONALS

- Inlet connections for cylinders • Flanges (EN1092-1/ANSI) • With relieving • Execution for liquids • Threaded connection for exhausting gas on bonnet • Bracket • Nut M46x1.5

NOTE

FILTER REGULATOR

Stainless steel



TCR 60 | STANDARD SERIES FROM 1/4" TO 3/4", 60 BAR

Filter/regulators made of stainless steel 316L, designed and manufactured for heavy-duty applications. Control system with convolved diaphragm for the best stability and precision. Balanced poppet-valve (shutter), to keep the outlet pressure almost constant and independent from fluctuation of inlet pressure. Self-relieving execution for exhausting over-pressure, just for compressed air application. Outlet pressure range till to 50 bar (725 psi), adjustable by screw with hexagonal head. Connections for outlet pressure gauge on both the sides. Special version (without self relieving for gases and water) on request.

APPLICATIONS:

- Pharmaceutical industry;
- Chemical industry;
- Oil & gas and Off Shore applications;
- Food industry;

FEATURES:

- Particular attention to the low level of roughness of surfaces, to grant high standard of cleaning;
- Compatible for use in aggressive environment;
- Suitable for extreme temperatures (-60°C), critical environments, hazardous applications;
- Suitable to be cleaned and sanitized by the most common processes;

MATERIALS

Body, bonnet	316L stainless steel
Bowl	316L stainless steel
Seals	NBR - EPDM - FKM - Silicone
Diaphragm	NBR - EPDM - FKM - Silicone
Internal parts	316L stainless steel
Shutter	PU - NBR - EPDM - FKM - Silicone
Filter element	Stainless steel 316L (5-25-50 μ)

TECHNICAL DATA

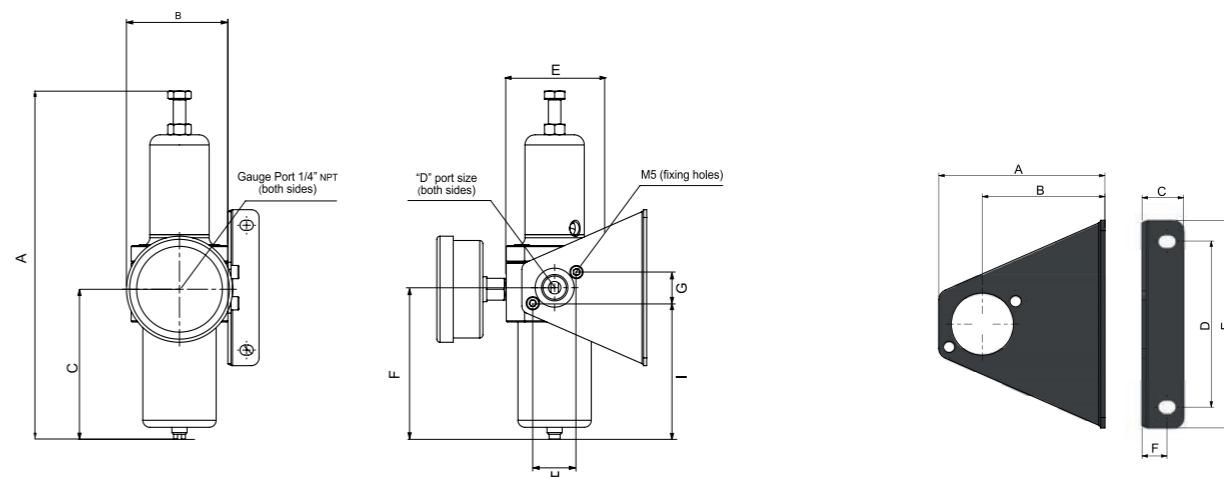
	1/4" - 3/8"	3/8" - 1/2" - 3/4" L
Port thread	TC ASME BPE - TC DIN32676 - ISO1127-1 In linea/Inline pattern	
P. max Inlet	16 Bar (with automatic drain) 60 Bar - 870 psi (50 bar Temp>80°C) Optional version TCR7 70 BAR	
Range outlet pressure	0.3-3 / 0.5-8 / 0.5-17.2 / 2.5-25 / 5-50 Bar / 4.4-44 / 7.2-116 / 7.2-250 / 36-362 / 72.5-725 Psi	
Gauge connections	1/4" BSPP F - 1/4" BSPP F	
Drain	Manual - Automatic	
Self-relieving port	1/8" BSPP F	
Flow rate *)	250 Nm ³ /h - 4160 dm ³ /min	310 Nm ³ /h - 5160 dm ³ /min
Kv	Kv = 1.69 Nm ³ /h (EN 60534)	Kv = 2.12 Nm ³ /h (EN 60534)
Weight	1.6kg/3lb	2.3kg/5lb
Working temp.	-25°C to +110°C (HNBR) / -50°C to +130°C (EPDM) -60°C to +230°C (Silicone) / -20°C +200°C FKM (optional)	
Conformity to Directives	94/9/EC ATEX - ASTM A182 Nace MR0.175 - 97/23/EC PED	

*) P_{IN} 10bar, P_{OUT} 6.3bar, ΔP 1bar

FILTER REGULATOR

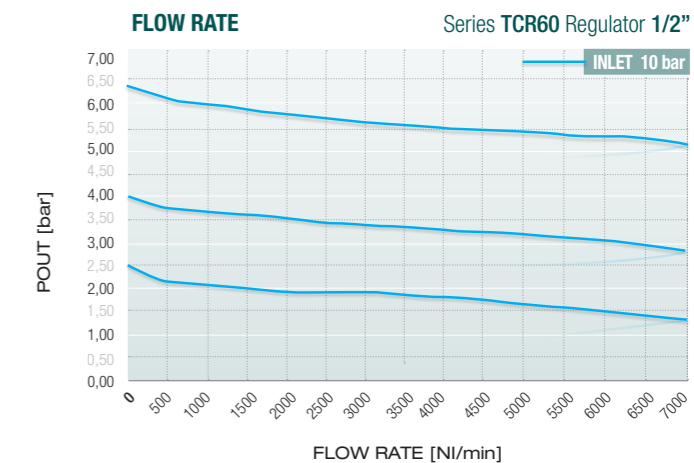
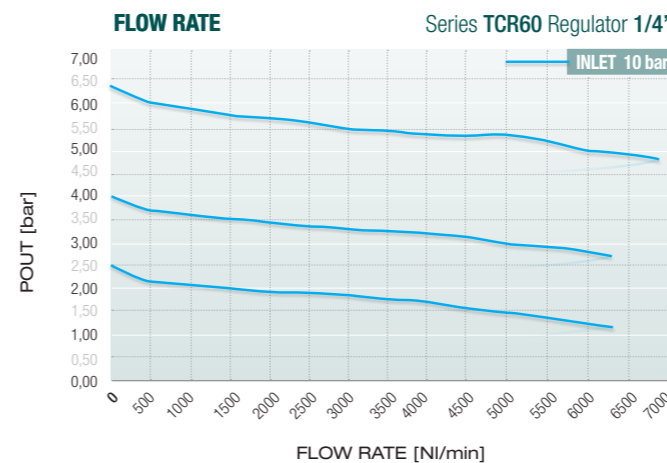
Stainless steel

DESIGNED AND CONSTRUCTED FOR HEAVY-DUTY APPLICATIONS



SIZE	A	B	C	D	E	F	G	H	I
1/4"-3/8"	234	60	112	1/4"	60	112	22	28	102
1/2"-3/4"	237	68	114	1/2"-3/4"	68	114	22	32	103
3/4" L	250	68	118	1/2"-3/4"	68	118	22	32	103

SIZE	A	B	C	D	E	F
1/4"	80	59	20	80	100	12
1/2"-3/4"	80	59	20	80	100	12



OPTIONALS

- Inlet pressure : max 70 bar • Inlet pressure: max. 100 bar • Bracket • Gauge • Flanges (EN1092-1/ANSI) • Without relieving
- Automatic drain (Pin max. 16 bar) • Oring Kalrez® • Connection for exhausting gas on bonnet

NOTE

FILTER REGULATOR

Stainless steel



TCR 60 | STANDARD SERIES FROM 1/4" TO 3/4", 60 BAR

Filter/regulators made of stainless steel 316L, designed and manufactured for heavy-duty applications. Control system with convolved diaphragm for the best stability and precision. Balanced poppet-valve (shutter), to keep the outlet pressure almost constant and independent from fluctuation of inlet pressure. Self-relieving execution for exhausting over-pressure, just for compressed air application. Outlet pressure range till to 50 bar (725 psi), adjustable by screw with hexagonal head. Connections for outlet pressure gauge on both the sides. Special version (without self relieving for gases and water) on request.

APPLICATIONS:

- Pharmaceutical industry;
- Chemical industry;
- Oil & gas and Off Shore applications;
- Food industry;

FEATURES:

- Particular attention to the low level of roughness of surfaces, to grant high standard of cleaning;
- Compatible for use in aggressive environment;
- Suitable for extreme temperatures (-60°C), critical environments, hazardous applications;
- Suitable to be cleaned and sanitized by the most common processes;

MATERIALS

Body, bonnet	316L stainless steel
Bowl	316L stainless steel
Seals	NBR - EPDM - FKM - Silicone
Diaphragm	NBR - EPDM - FKM - Silicone
Internal parts	316L stainless steel
Shutter	PU - NBR - EPDM - FKM - Silicone
Filter element	Stainless steel 316L (5-25-50 μ)

TECHNICAL DATA

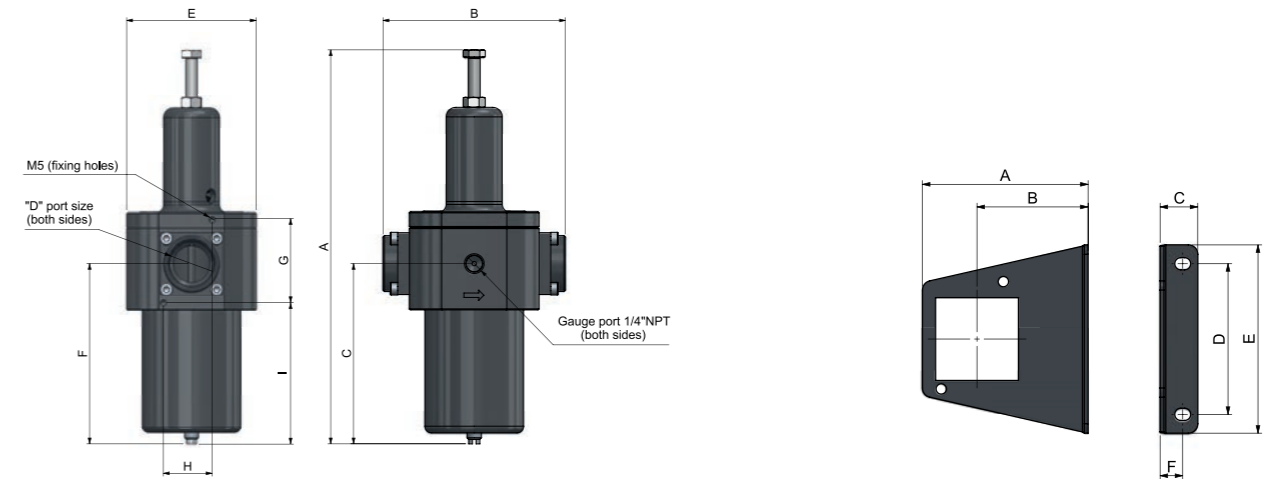
	3/4"	1"
Port thread	3/4" BSPP F - 3/4" NPT F	1" BSPP F - 1" NPT F
P. max Inlet	60 Bar (50 bar Temp>80°C) 16 Bar with automatic drain	
Range outlet pressure	0.3-3 / 0.5-8 / 0.5-17.2 / 2.5-25 / 5-50 Bar / 4.4-44 / 7.2-116 / 7.2-250 / 36-362 / 72.5-725 Psi	
Gauge connections	1/4" BSPP F - 1/2" BSPP F	
Drain	Manual - Automatic	
Self-relieving port	1/8" BSPP F	
Flow rate *)	850 Nm ³ /h - 14000 lt/min	
Kv*)	Kv = 4.23 Nm ³ /h (EN 60534)	
Weight	4.2kg/9lb	
Working temp.	-25°C to +110°C (HNBR) / -50°C to +130°C (EPDM) -60°C to +230°C Silicone / -20°C +200°C FKM (optional)	
Conformity to Directives	CE 94/9/EC ATEX - ASTM A182 Nace MR0.175 - 97/23/EC PED	

*) P_{IN} 10bar, P_{OUT} 6.3bar, ΔP 1bar

FILTER REGULATOR

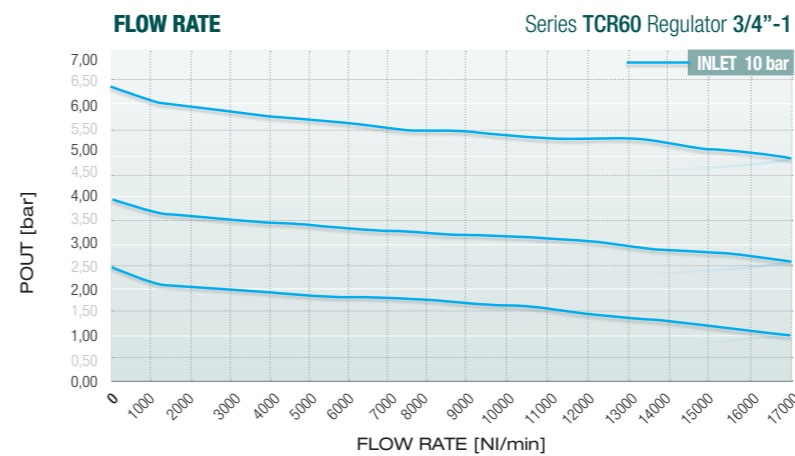
DESIGNED AND CONSTRUCTED FOR HEAVY-DUTY APPLICATIONS

Stainless steel



SIZE	A	B	C	D	E	F	G	H	I
3/4" - 1"	268	114	123	3/4"-1	88	123	57	33	96

SIZE	A	B	C	D	E	F
1/4"	88	59	20	80	100	12



OPTIONALS

- Bracket • Gauge • Flanges (EN1092-1/ANSI) • Without relieving • Automatic drain (Pin max. 16 bar) • Oring Kalrez®
- Threaded connection for exhausting gas on bonnet

NOTE

FILTER

Stainless steel



TCR 6 | STANDARD SERIES
FROM 1/4" TO 3/4", 60 BAR

Stainless steel 316 L filters designed and manufactured for heavy-duty applications. Completely made of stainless steel 316 L, they are compatible with all liquids and gases

APPLICATIONS:

- Pharmaceutical industry;
- Chemical industry;
- Oil & gas and Off Shore applications;
- Food industry;

FEATURES:

- Particular attention to the low level of roughness of surfaces, to grant high standard of cleaning;
- Compatible for use in aggressive environment;
- Suitable for extreme temperatures (-60°C), critical environments, hazardous applications;
- Suitable to be cleaned and sanitized by the most common processes;

MATERIALS

Body, bonnet	316L stainless steel
Bowl	316L stainless steel
Seals	NBR - EPDM - FKM - Silicone
Internal parts	316L stainless steel
Filter element	Stainless steel 316L (5 µm, 25 µm, 50 µm or coalescent 0.01µm)

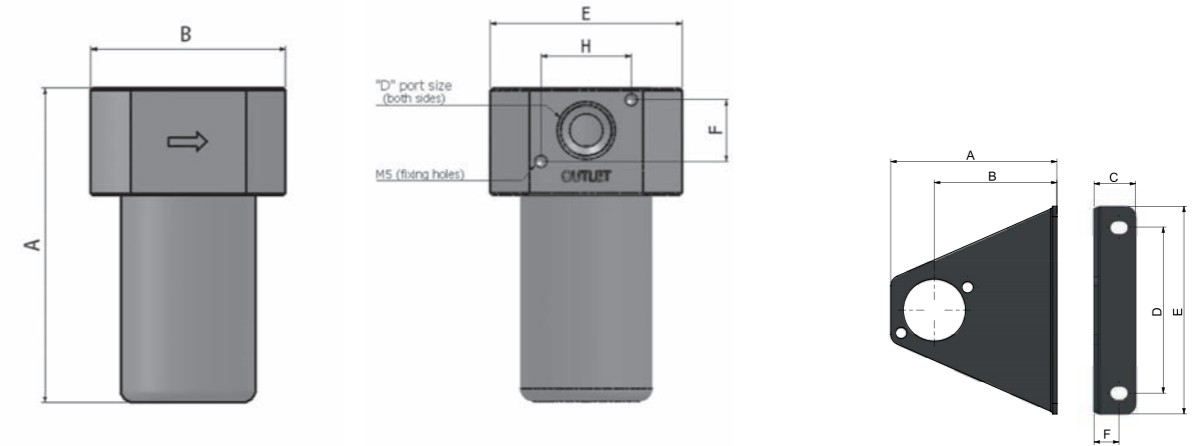
TECHNICAL DATA

	1/4"-3/8"	1/2"-3/4"
Port thread	1/4" BSPP F - 1/4" NPT F	1" BSPP F - 1" NPT F
P. max Inlet	60 Bar (50 bar Temp>80°C) 16 Bar with automatic drain	
Flow rate *)	260 Nm ³ /h - 4400 dm ³ /min	350 Nm ³ /h - 5900 dm ³ /min
Weight	1.6kg/3lb	2.3kg/5lb
Working temp.	-25°C to +110°C (HNBR) / -50°C to +130°C (EPDM) -60°C to +230°C Silicone / -20°C +200°C FKM (optional)	
Conformity to Directives	94/9/EC ATEX - ASTM A182 Nace MR0.175	

FILTER

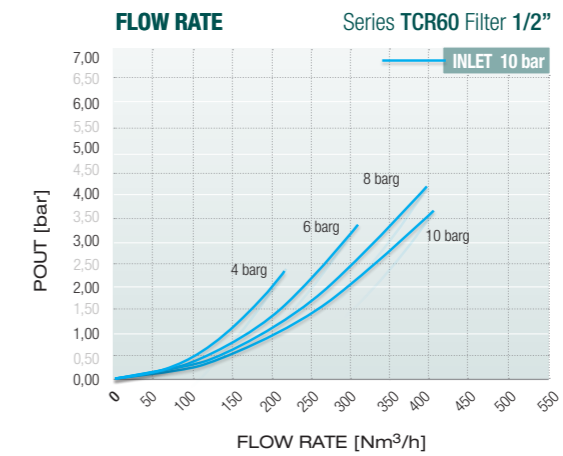
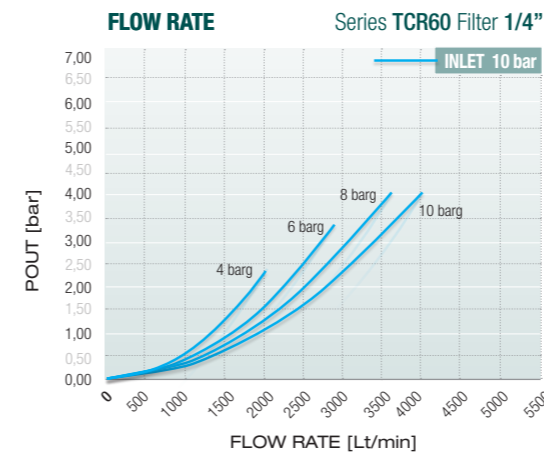
Stainless steel

DESIGNED AND CONSTRUCTED FOR HEAVY-DUTY APPLICATIONS



SIZE	A	B	C	D	E	F	G	H	I
1/4"	108	60	-	1/4"	60	11	-	28	-
1/2"-3/4"	111	68	-	1/2"-3/4"	68	22	-	32	-

SIZE	A	B	C	D	E	F
1/4"	88	59	20	80	100	12
1/2"-3/4"	88	59	20	80	100	12



OPTIONALS

- Bracket
- Flanges
- Coalescing microfilter 0.01µm
- Oring Kalrez®

NOTE

FILTER

Stainless steel



TCR 10 | STANDARD SERIES
FROM 1/4" TO 3/4", 100 BAR

Stainless steel 316 L filters designed and manufactured for heavy-duty applications. Completely made of stainless steel 316 L, they are compatible with all liquids and gases

APPLICATIONS:

- Pharmaceutical industry;
- Chemical industry;
- Oil & gas and Off Shore applications;
- Food industry;

FEATURES:

- Particular attention to the low level of roughness of surfaces, to grant high standard of cleaning;
- Compatible for use in aggressive environment;
- Suitable for extreme temperatures (-60°C), critical environments, hazardous applications;
- Suitable to be cleaned and sanitized by the most common processes;

MATERIALS

Body, bonnet	316L stainless steel
Bowl	316L stainless steel
Seals	NBR - EPDM - FKM - Silicone
Internal parts	316L stainless steel
Filter element	Stainless steel 316L (5 µm, 25 µm, 50 µm or coalescent 0.01µm)

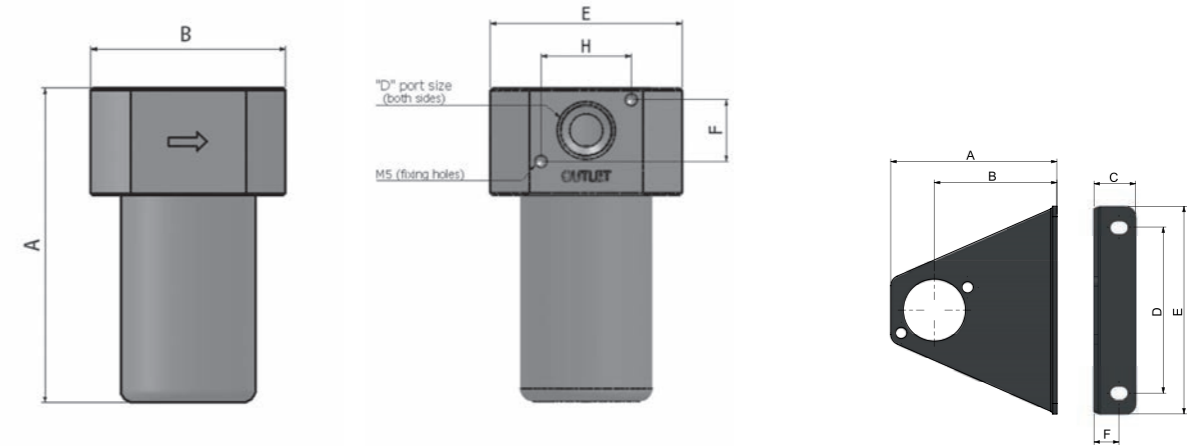
TECHNICAL DATA

	1/4"-3/8"	1/2"-3/4"
Port thread	1/4" BSPP F - 1/4" NPT F	½"-¾"BSPP F - ½"-¾" NPT F
P. max Inlet	100 Bar / 1450 Psi no drain (50 bar Temp>80°C)	
Flow rate *)	260 Nm ³ /h - 4400 dm ³ /min	350 Nm ³ /h - 5900 dm ³ /min
Weight	1.6kg/3lb	2.3kg/5lb
Working temp.	-25°C to +110°C (HNBR) / -50°C to +130°C (EPDM) -60°C to +230°C Silicone / -20°C +200°C FKM (optional)	
Conformity to Directives	94/9/EC ATEX - ASTM A182 Nace MR0.175	

FILTER

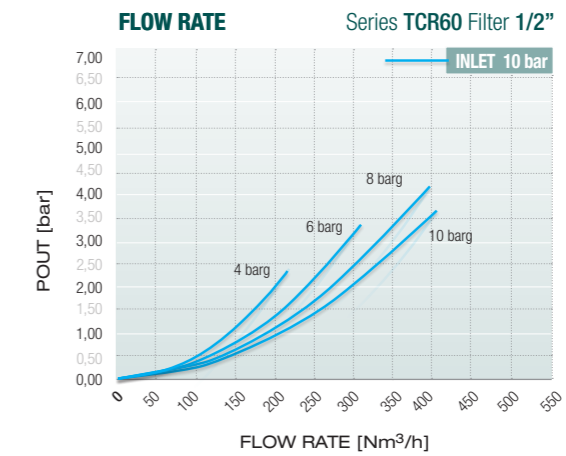
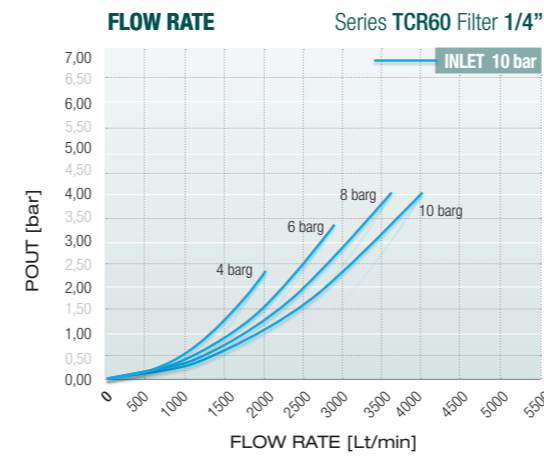
Stainless steel

DESIGNED AND CONSTRUCTED FOR HEAVY-DUTY APPLICATIONS



SIZE	A	B	C	D	E	F	G	H	I
1/4"	108	60	-	1/4"	60	11	-	28	-
1/2"-3/4"	111	68	-	1/2"-3/4"	68	22	-	32	-

SIZE	A	B	C	D	E	F
1/4"	88	59	20	80	100	12
1/2"-3/4"	88	59	20	80	100	12



OPTIONALS

- Bracket • Flanges • Coalescing microfilter 0.01µm • Oring Kalrez®

NOTE

FILTER

Stainless steel

TCR 6 | STANDARD SERIES FROM 3/4" TO 1", 60 BAR

Stainless steel 316L filters designed and manufactured for heavy-duty applications. Completely made of stainless steel 316 L, they are compatible with all liquids and gases

APPLICATIONS:

- Pharmaceutical industry;
- Chemical industry;
- Oil & gas and Off Shore applications;
- Food industry;

FEATURES:

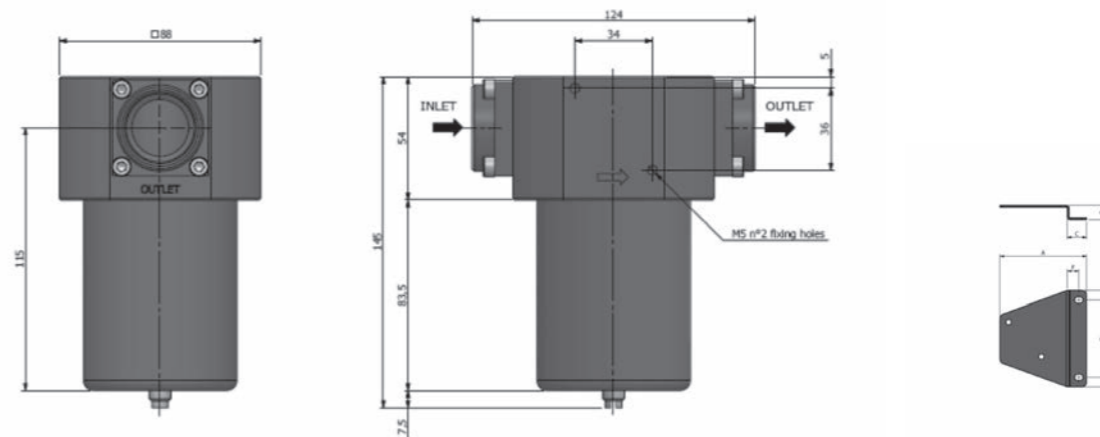
- Particular attention to the low level of roughness of surfaces, to grant high standard of cleaning;
- Compatible for use in aggressive environment;
- Suitable for extreme temperatures (-60°C), critical environments, hazardous applications;
- Suitable to be cleaned and sanitized by the most common processes;



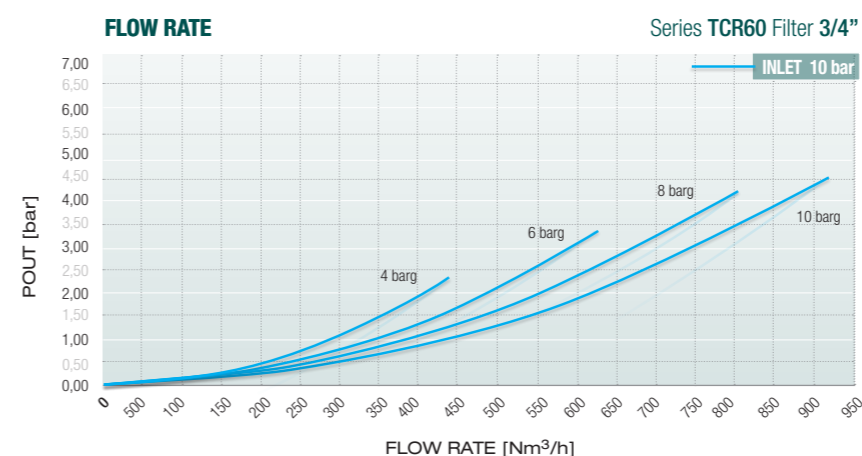
FILTER

Stainless steel

DESIGNED AND CONSTRUCTED FOR HEAVY-DUTY APPLICATIONS



SIZE	A	B	C	D	E	F
3/4"	90	15	20	80	100	12



OPTIONALS

- Bracket
- Flanges
- Coalescing microfilter 0.01µm
- Oring Kalrez®

NOTE

MATERIALS

Body, bonnet	316L stainless steel
Bowl	316L stainless steel
Seals	NBR - EPDM - FKM - Silicone
Internal parts	316L stainless steel
Filter element	Stainless steel 316L (5 µm, 25 µm, 50 µm or coalescent 0.01µm)

TECHNICAL DATA

	3/4"	1"
Port thread	3/4" BSPP F - 3/4" NPT F	1" BSPP F - 1" NPT F
P. max Inlet	60 Bar (50 bar Temp>80°C) 16 Bar with automatic drain Optional version 70 Bar	
Flow rate *)	950 Nm3/h	
Weight	3.25kg/7lb	
Working temp.	-25°C to +110°C (HNBR) / -50°C to +130°C (EPDM) -60°C to +230°C Silicone / -20°C +200°C FKM (optional)	
Conformity to Directives	94/9/EC ATEX - ASTM A182 Nace MR0.175	