

Specifications

For other materials or modifications, please consult TESCOM.

FLUID MEDIA

Non corrosive/corrosive gases and mixtures up to high purity of 6.0 (99.9999 Vol%)

OPERATING PARAMETERS

Pressure rating per criteria of ANSI/ASME B31.3

Maximum Inlet Pressure
4350 psig / 300 bar

Outlet Pressure Range
50/101/145/174/217/290/507/725/870/1450/2175 PSIG*
3,5/7/10/12/15/17/20/35/50/60/100/150 bar *

Material
Brass or Stainless Steel

Leak Rate
10⁻⁷ mbar l/s He

Operating Temperature
-4°F to 158°F / -20 °C to 70 °C

Nominal Flow Rate (Air 145 PSIG/10 bar Outlet Pressure)
1 Nm³/h [0.6 scfm] reduced version for H₂/He, C_v = 0,06
9 Nm³/h [5.3 scfm], C_v = 0,06
15 Nm³/h [8.8 scfm], C_v = 0,15

* Outlet pressure range depends on compact panel version

MEDIA CONTACT MATERIALS

Body
316 Stainless Steel or Nickel-plated Brass

Diaphragm
316L Stainless Steel

OTHER

Inlet Port Type and Size
G 3/8" female with compression fitting
Compression fitting 6 mm

Outlet Port Type and Size
Process Outlet: G 1/4" *
Purge Gas: G 1/4" *
Relief Valve: M 12x1 **

Cleaning
Cleaned for Oxygen Service

Weight (approximately)
17.6 lbs / 8.0 kg for 2x1 cylinder
7.7 lbs / 3.5 kg for 1 cylinder

* Adapters to all metric and imperial tube sizes available!
Please check data sheet "Fittings" for adaptors

** Adapter PIN to metric tube available!
Please contact TESCOM.



PANEL FOR 1 CYLINDER WITH CONTACT GAUGE



DUAL STAGE COMPACT PANEL AUTOMATIC CHANGEOVER WITH CONTACT GAUGES

The TESCOM Compact Panel is a central gas supply unit for the pressure control of analytical gases in laboratory facilities. Depending on the requirements, these units switch over to a spare cylinder in order to enable a continuous gas supply. The use of contact gauges allows the monitoring of empty gas cylinders.

Applications

- For inert,corrosive, flammable and specialty gas pressure reduction
- Central gas supply for the distribution of gases in laboratory applications
- Supply of gases for laser cutting applications
- Various other processes requiring continuous gas supply

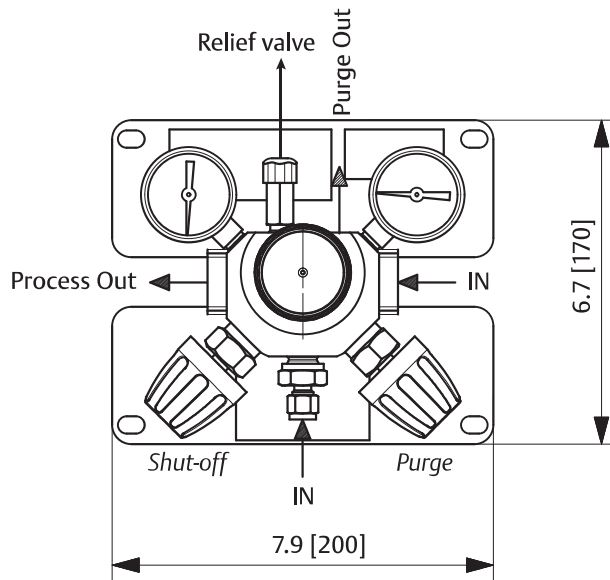
Features and Benefits

- Monoblock construction with reduced fitting and pure metal to metal sealing for high leak integrity
- Low internal volume with no thread in contact with media to maintain the gas purity and Short purge time when changing the cylinders
- Built-in diaphragm purge and shutoff valve for high leak tightness and maintain the gas purity
- Stainless Steel mounting plate for corrosive environment
- Compact in size, fits into standard gas cabinets even 9.84 inch /25 cm grid dimension
- Relief valve is standard (pipe away outlet is optional)

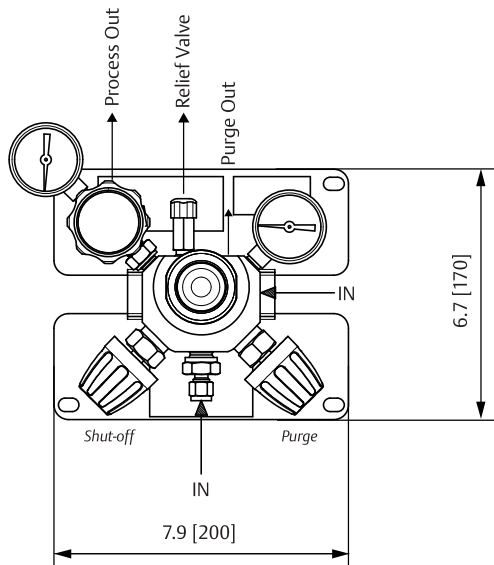
COMPACT PANEL

Compact Panel Drawing

KP1 (Compact panel, 1 cylinder, standard manometer)



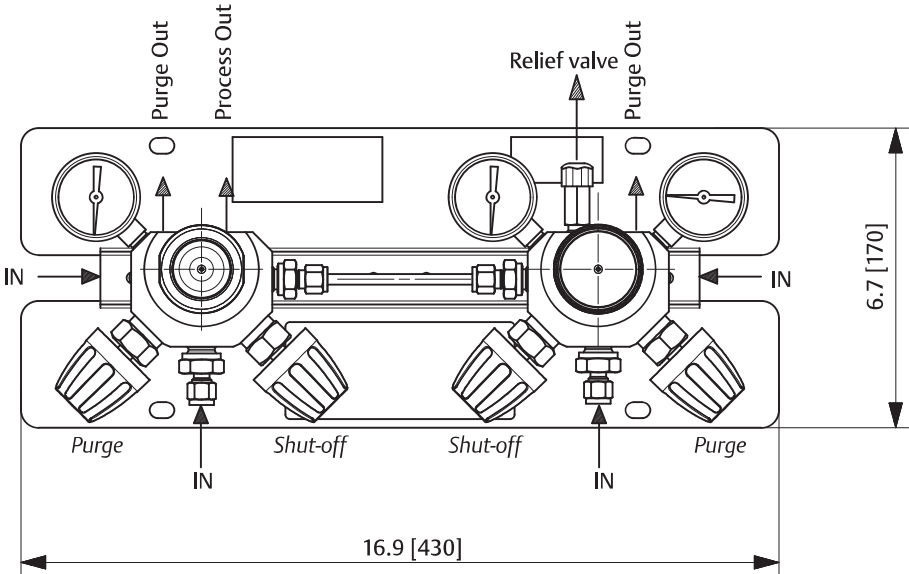
KP12 (Compact panel, 1 cylinder, dual stage)



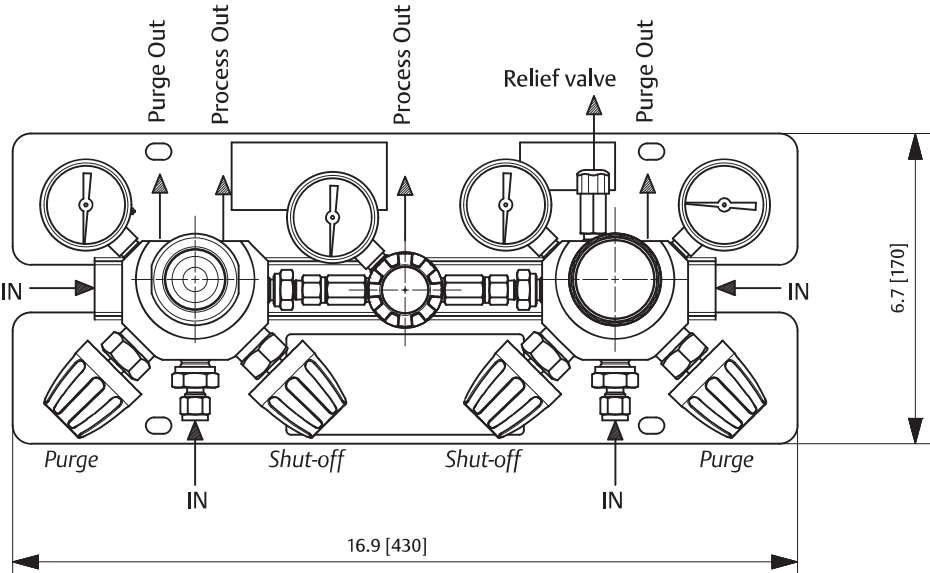
All dimensions are reference & nominal
Metric [millimeter] equivalents are in brackets

Compact Panel Drawing

KPA – Automatic changeover, single-stage (Compact Panel, 2x1 cylinder, standard manometer)



KPA2 – Automatic changeover, dual-stage (Compact Panel, 2x1 cylinder, standard manometer)

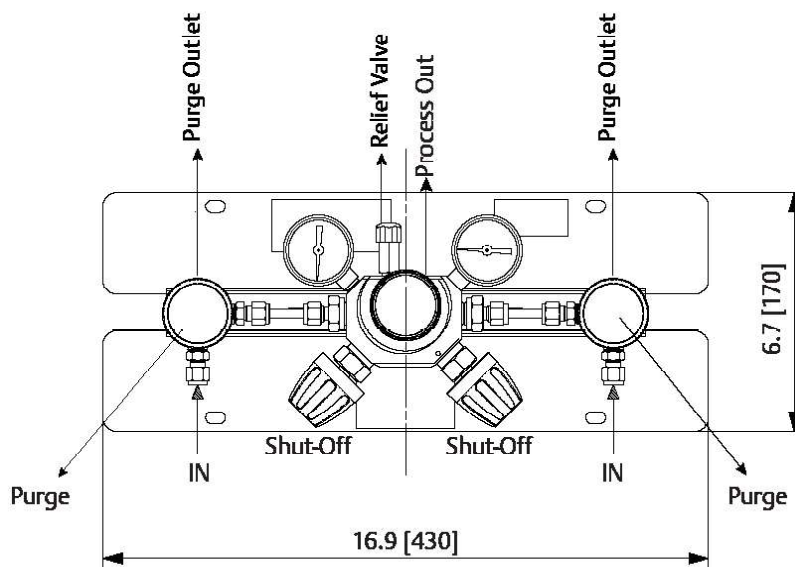


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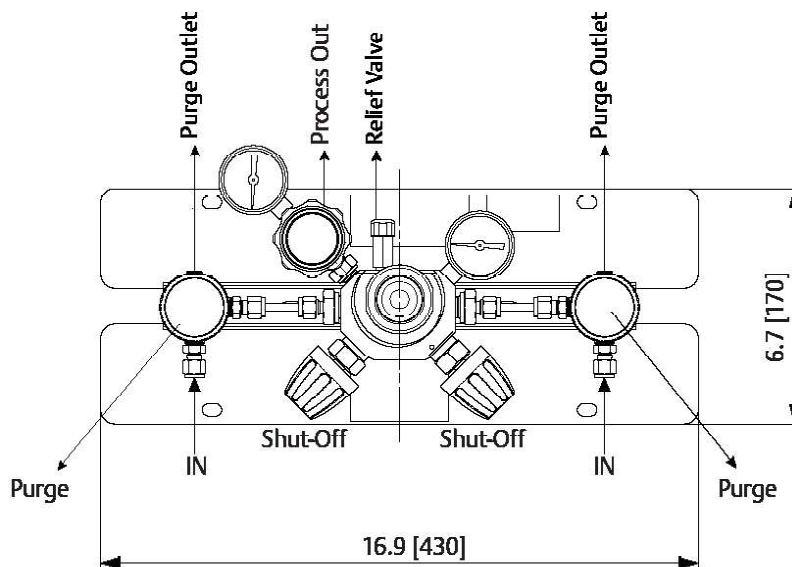
COMPACT PANEL

Compact Panel Drawing

KPME -Manual changeover (for 2x1 cylinder, manual changeover, with relief valve)



KPME2 – Manual changeover (Compact Panel, 2x1 cylinder, manual changeover with relief valve dual stage)



All dimensions are reference & nominal
Metric [millimeter] equivalents are in brackets

Compact Panel Part Number Selector

Repair Kits, Accessories & Modifications may be available for this product. Please contact TESCOM for more information.

Example for selecting a part number:

KPA2-	6	SM	1	R	T	A	A	14	F	1
BASIC SERIES	MATERIAL	INLET PRESSURE DISPLAY	OUTLET PRESSURE PSIG / BAR	PERFORMANCE	LABEL	CONNECTION PROCESS *	CONNECTION FOR DISCHARGE *	GAS GROUPS CONNECTING BEND PN 200 **	ACCESSORY	UPSTREAM PRESSURE PSIG / BAR
KP1 1 cylinder	1 – Brass 6 – SST	SM – Standard gauge	1 – 145 / 10 2 – 290 / 20	blank – Standard 9 Nm ³ /h [5.3 scfm] Air Cv 0.06 R – reduced 1 Nm ³ /h [0.6 scfm] Air for H ₂ and He Cv 0.06 H – Standard 15 Nm ³ /h [8.8 scfm] Air Cv 0.15	T – TESCOM	A – G1/4 female	A – no screw connection B – ø 6 mm SST purge valve ø 8 mm SST relief valve C – ø 8 mm Brass purge valve ø 8 mm SST relief valve D – ø 8 mm brass purge valve without screw connection * for relief valve E – ø 6 mm SST purge valve ø 6 mm SST relief valve F – ø 1/4" SST purge valve ø 1/4" SST relief valve G – without screw connection * for purge valve ø 8 mm SST relief valve H – ø 8 mm SST purge valve ø 8 mm SST relief valve	0 – without connecting bend	Blank – no accessory F – Cylinder rack S – Collector pipe/extension	Blank – 4350 / 300 1 – 1450 / 100 CO ₂ /Nitrous oxide 6 – 232 / 16 Liquid gas Ammonia **** only SST
KP12 1 cylinders dual stage		KM – Contact gauge	3 – 507 / 35 4 – 870 / 60			9 – Oxygen				
KPA 2x1 cylinders, automatic changeover, single stage		EX – Inductiv contact gauge	5 – 1450 / 100 6 – 2175 / 150			13 – Compressed air				
KPA2 2x1 cylinders, automatic changeover, dual stage		PS – Standard pressure transducer	7 – 101 / 7 only KP12 8 – 217 / 15			6 – non flammable gases 1 – Flammable gases 10 – Nitrogen 14 – Test gas 11 – Nitrous oxide 5 – Toxic, flammable gases (only SST)				
KPME 2x1 cylin- ders, manual changeover with relief valve		PT – Explosion tested pressure transducer	9 – 246 / 17 only KP12 10 – 174 / 12 only KPA2 11 – 725 / 50 only KPA 12 – 50 / 3,5 only KP12			GAS GROUPS CONNECTING BEND PN 200 CGA				
KPME2 2x1 cylin- ders, manual changeover with relief valve dual stage						23 – Hydrogen, Natural gas (CGA – 350)				
						24 – Inert gas, Nitrogen (CGA – 580)				
						25 – Nitrous oxide (CGA – 326)				
						26 – Compressed air (CGA – 590)				
						27 – Non flammable gases (CGA – 320)				
			28 – Oxygen (CGA – 540)							
			GAS GROUPS CONNECTING BEND PN 300 ***							
			56 – Compressed air							
			59 – Oxygen							
			54 – non flammable gases							
			57 – flammable gases							
			N – 1/4 NPT female							

* Double ferrule fitting / ** DIN 477-1 / *** DIN 477-5 / **** only Stainless Steel

Please reference data sheets "Accessories for Panels" and "Fittings" for additional accessories for compact panel.

Please reference data sheet "System Components for Compact Panels" for information about annunciator system and emergency switch-off components."