

Compact Panel

Manifolds/Changeover Regulators

DCATLABO1259XEN2

Specifications

For other materials or modifications, please consult TESCO. M.

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

SONSTIGES

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

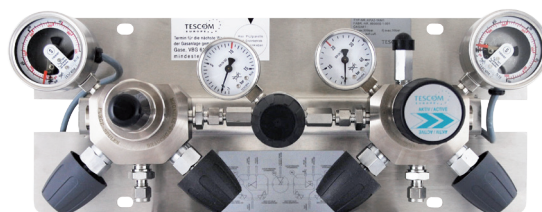
7.7 lbs / 3.5 kg for 1 cylinder

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

** Adapter PIN to metric tube available!
Please contact TESCO. M.



PANEL FOR 1 CYLINDER
WITH CONTACT GAUGE



DUAL STAGE COMPACT PANEL
AUTOMATIC CHANGEOVER WITH CONTACT GAUGES

The TESCO 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

- 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

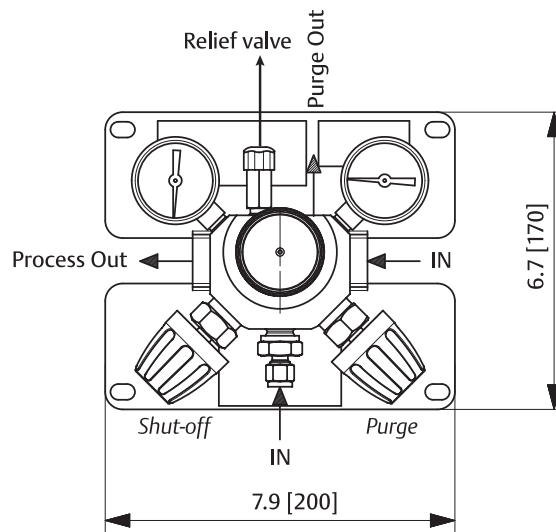
Features and Benefits

- A few internal connections and free volume through monoblock construction with precise, pure metal seated connection port and completely unthreaded wetted surface
- Suitable for ECD (Electron Capture Detector) applications
- Short purging time when changing cylinders
- Easy and quick to maintain - a P & ID is located on front of the panel
- Stainless Steel mounting plate for corrosive environments
- Very compact design fits into standard gas cabinets even 9.84 inch / 25 cm grid dimension
- All versions contain a filter element in the inlet

Compact Panel Drawing

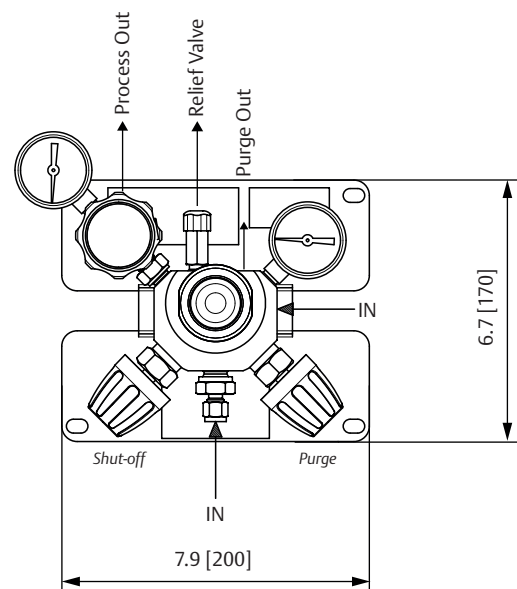
KP1

(Compact panel, 1 cylinder, standard manometer)



KP12

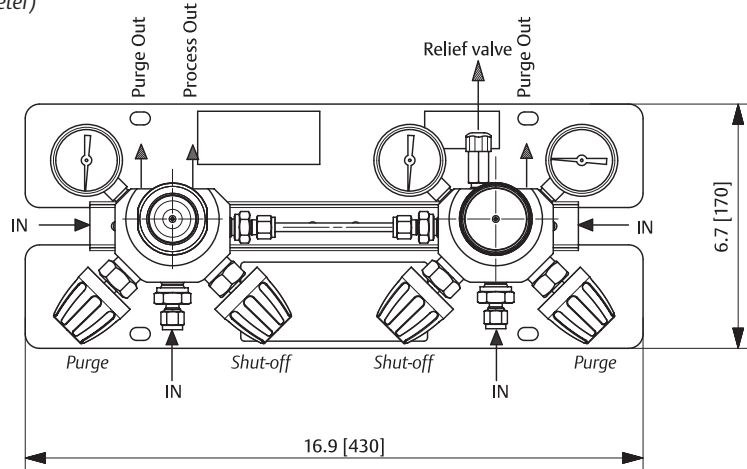
(Compact panel, 1 cylinder, dual stage)



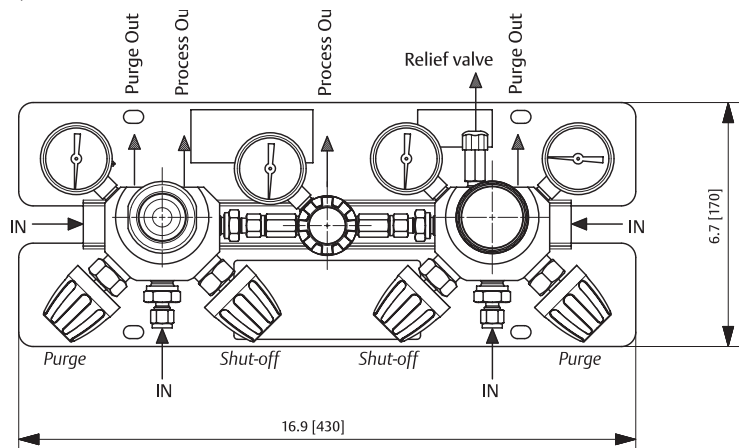
All dimensions are reference & nominal
Metric [millimeter] equivalents are in brackets

Compact Panel Drawing

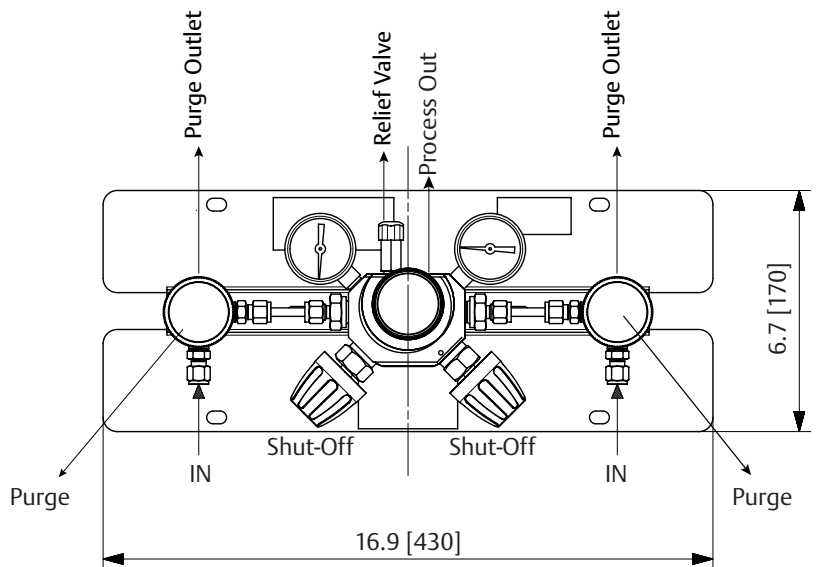
KPA – Automatic changeover, single-stage
 (Compact Panel, 2x1 cylinder, standard manometer)



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



KPME
 (for 2x1 cylinder, manual changeover,
 single-stage with purge valve)



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:

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

* 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."



WARNING! Do not attempt to select, install, use or maintain this product until you have read and fully understood the TESCOM Safety, Installation and Operation Precautions.

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