





KHC pressure transmitters are based on film sensing element deposited on stainless steel diaphragm.

Thanks to the latest state of the art SMD electronics and compact all stainless steel construction, this products are extremely robust and reliable, specially suitable for mobile hydraulics applications.

In particular the KHC series combines high accuracy with temperature stability, resistance to extreme environmental conditions and digital outputs with mobile hydraulics typical protocols. The model KHC is available with either CANopen® or J1939 protocol.

Developed to ensure a robust and high-performance solution for applications such as agricultural machines, contruction machines and material handling equipments.

The digital signal, in addition to the pressure measurement, also contains the data related to the temperature of the device.

The instrument is delivered preconfigured and ready to be used without any further effort. Custom configurations are also possible, to be specified on order, or

programmable by the user.

- 1) Incl. Non-Linearity, Hysteresis, Repeatability, Zero-offset and Span-offset tolerance (acc. to IEC 61298-2)
- 2) The operating pressure range is intended from 0.5 to 100% FS
- 3) Time within which the rated performance ia achieved

TECHNICAL DATA

	Pressure ranges (2)
	from 4 to 1000 bar (see table)
	Power supply
	8 32 Vdc
	Signal output
	Digital CANopen® DS404 profile
	Digital J1939
	Non-Linearity (BFSL)
	± 0.15% FS (typical) ± 0.25% FS (max)
	Hysteresis
a	+ 0.1% FS (typical) + 0.15% FS (max)
g	Repeatability
	± 0.025% FS (typical) ± 0.05% FS (max)
:5	Zero & Span setting tolerance
)- a-	± 0.15% FS (typical) ± 0.25% FS (max)
	Accuracy at room temperature (1)
	<± 0.5% FS
:y ri-	Overvoltage protection
le	40 Vdc max
a -	Wetted parts
	Stainless steel Inox AISI 430F (1.4104) and 17-4 PH (1.4542)
	Housing
g	Stainless steel Inox AISI 304 (1.4301)
9	Insulation voltage
_	500 Vdc
э- °е	Long term stability
-	<± 0.2% FS/per year
h.,	Operating temperature range
ly u-	-40 +125°C (process and storage) -40 +105°C (ambient)
or	Compensated temperature range
	-20 +85°C
	Temperature effects over compensated range (zero)
	$\pm 0.01\%$ FS/°C typical ($\pm 0.02\%$ FS/°C max)
	Temperature effects over compensated range (span)
	± 0.01%FS/°C typical (± 0.02%FS/°C max)
	Measuring rate
	1 msec (1000 Hz) typical Warm-up time (3)
	<30 sec
	Weight
	150 ar
	Mechanical Shock
	100g/11 ms according to IEC 60068-2-27
	Vibrations
	20g at 10 Hz 2000 Hz according to IEC 60068-2-6
	Ingress protection
	IP67/IP69K with appropriate mating connector plugged in
	Output short circuit and reverse polarity protection
	Yes
	EC Conformity
	According to Directive 2014/30/EU

PRESSURE RANGES

RANGES (Bar)	4	6	10	16	20	25	40	60	100	160	200	250	400	600	1000
Overpressure (Bar)	8	12	20	32	40	50	80	120	200	320	400	500	800	1200	1200
Burst pressure (Bar)	16	24	40	64	80	100	160	240	400	640	800	1000	1500	1500	1500

MECHANICAL DIMENSIONS



ELECTRICAL CONNECTION - Connectors



ELECTRICAL CONNECTION - Connection diagrams



PRESSURE PEAKS PROTECTION

Many industrial applications, especially in hydraulics, could present dangerous phenomena like cavitation, liquid hammer or pressure peaks, due for example to pumps start and stop or fast closing of a valve. These phenomena can be harmful to the transducer.

The KHC series, upon request, is available with an integrated pressure snubber which, thanks to a 0.5 mm diameter through hole, eliminates these harmful peaks, to protect the transducer.

Contact Gefran to request the version with pressure snubber.

ACCESSORIES ON REQUEST



EXTENSION CABLES

Extension cable with female connector, 5 pin M12x1, protection IP67

		CODE				
Length		Straight Connecor	90° Connector			
2	mt	CAV011	CAV021			
5	mt	CAV012	CAV022			
10	mt	CAV013	CAV023			
15	mt	CAV015	CAV024			

Cable color code						
Pin	Wire					
1	Brown					
2	White					
3	Blue					
4	Black					
5	Grey					



ORDERING INFORMATION



GEFRAN spa reserves the right to make any kind of design or functional modification at any moment without prior notice.



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