

OEM Pressure Transducer for Hydraulics and Pneumatics

S M S

Main Features

- Measuring range from -1 to 0 bar, 0 to 0.6 bar and 0 to 1,000 bar
- Fully welded, vacuum-proof stainless steel membrane (CrNi steel)
- Shock-proof and vibration-proof > 1000g shock, > 20g vibration
- Designed for OEM quantities and, therefore, available at a very reasonable price-performance ratio
- Extremely short design (thread G1/4 with M12 Binder plugs smaller than 49 mm in total length)

Applications

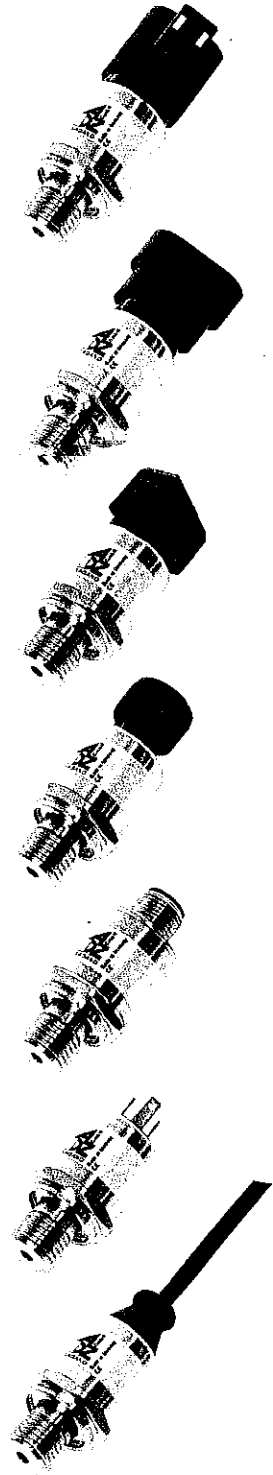
- Mobile hydraulics
- Hydraulics
- Pneumatics
- Mechanical engineering / presses
- Air conditioning
- Automotive engineering

Description

ADZ NAGANO GmbH introduces the new pressure transmitter series "SMS" based on its proven stainless steel cell. Being both short and compact in design, combined with precision and a long lifecycle, it sets new standards in the field of fully electronic pressure-measuring technology. A hermetically welded thin-film cell (Poly-Si) in steel housing and, therefore, extremely robust, despite its tiny design. Commercial OEM-integrated plug-variants, Packard, 4-pin Deutsch, AMP-Super Seal, Junior-Timer, Binder - M12 series and cable variants can be obtained. Output signals from 4 to 20 mA (two-leads), 0 to 10 V, 1 to 5 V as well as 0.5 to 4.5 V ratiometrically are available as a standard.

ADZ NAGANO is certified acc. to TS16949.

As a matter of course, custom-made adjustments are possible with this product.



ADZ NAGANO
Sensortechnik

Specifications

Measuring range*	bar	4	10	16	40	100	160
Overload pressure	bar	20	20	40	200	200	320
Burst pressure	bar	80	80	120	800	800	1000

Measuring range*	bar	250	400	600
Overload pressure	bar	750	800	1.200
Burst pressure	bar	1.000	1.000	1.800

Output signal * and maximum acceptable burden R_A	R_A in Ohm	4-20 mA	(2-wire, 3-wire)	V_s 9-32 V	R_L	R_A ($U_b - 10 V$) / 0,02 A
		0-10 V	(3-wire)		12-32 V	> 1k Ohm
		1-5 V			8-32 V	> 1k Ohm
		0-5 V			8-32 V	> 1k Ohm
		0,5-4,5 V rat.			5 V \pm 0,5 V DC	> 1k Ohm

Response time (10-90%) < 1 ms

Dielectric strength 350 VDC

Accuracy % of the range $\leq 0,5$ incl. non-linearity, hysteresis, repeatability, zero-offset- and final-offset
(acc. to IEC 61298-2)

Non-linearity % of the range $\leq 0,2$ (BFSL)

Stability/year % of the range $\leq 0,1$ (at reference conditions)

Acceptable temperature ranges

Measuring medium	°C	-40 to 140	
Ambience	°C	-40 to 105	(-40 to 120 at ratiometric)
Storage	°C	-40 to 120	
Compensated range	°C	-40 to 105	

Temperature coefficient within the compensated range

Mean TC offset	% of the range	$\leq 0,15 / 10k$
Mean TC range	% of the range	$\leq 0,15 / 10k$
Total error	-40°C	2%
	105°C	1,5%

Material

Parts in contact with the measuring medium	CrNi-steel
Housing	CrNi-steel

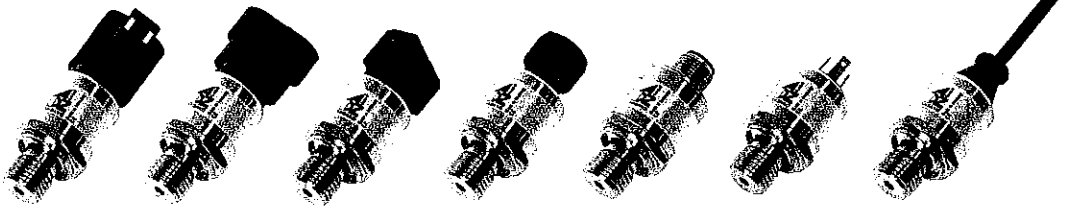
Remarks

CE - conformity		EC Directive 89/336/EWG
Shock resistance	g	1000 acc. to IEC 68-2-32
Vibration resistance	g	20 acc. to IEC 68-2-6 and IEC 68-2-36
Mass	g	approx. 60* (depending on electrical connection)

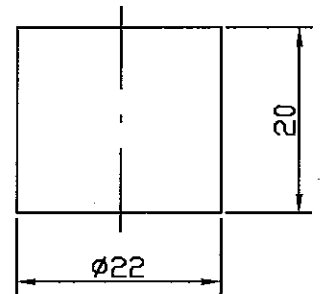
* others upon request

Configurations

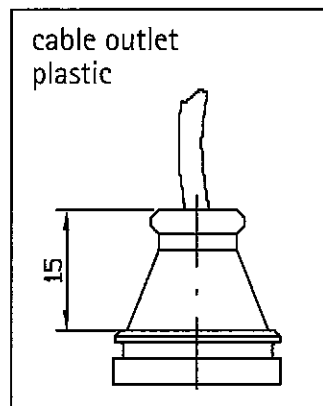
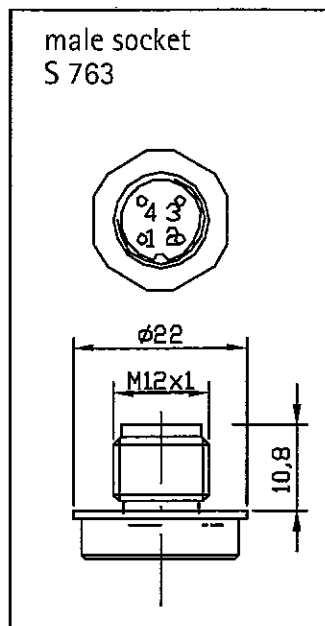
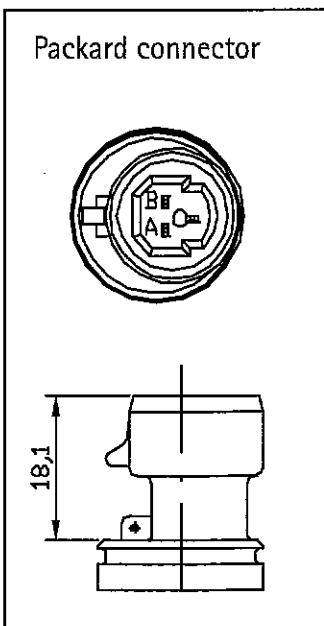
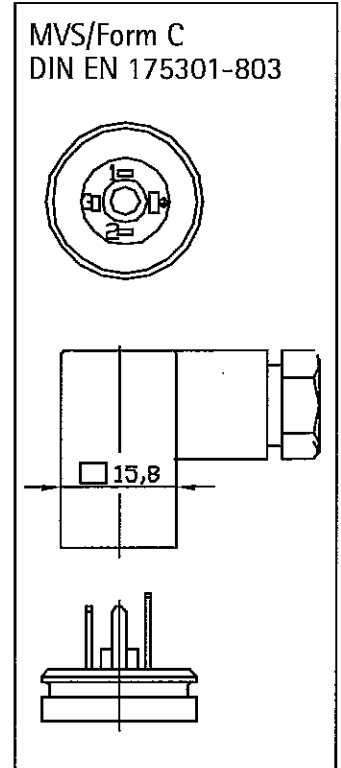
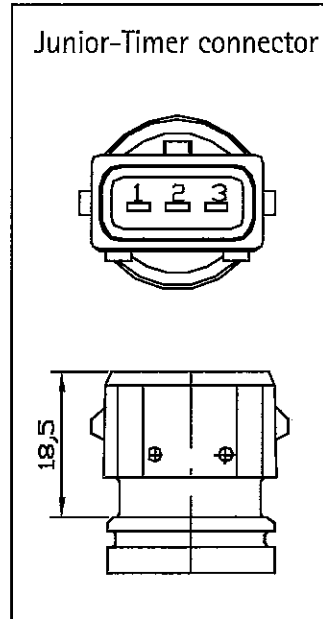
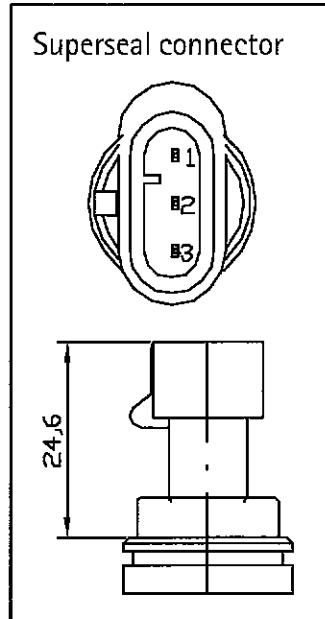
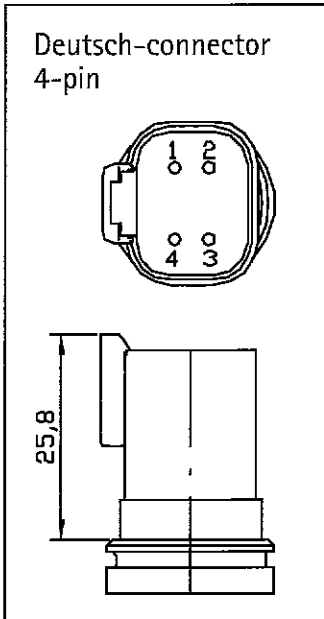
Housing



Deutsch-connector Super-seal Junior-Timer Packard M12 (S763) MVS/C cable



Connectors

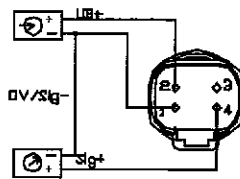
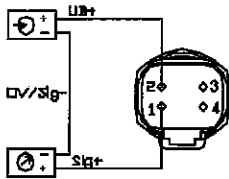


S M S

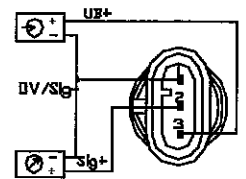
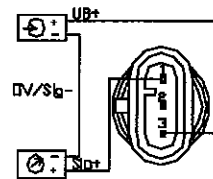
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Electrical Connections (left: 2-wire, right: 3-wire)

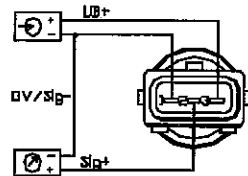
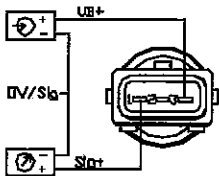
Deutsch-
connector
4-pin



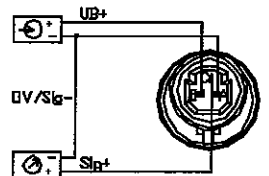
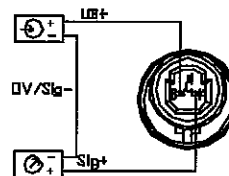
Superseal
connector



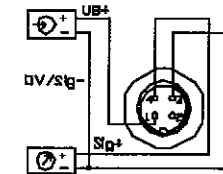
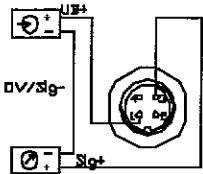
Junior-Timer
connector



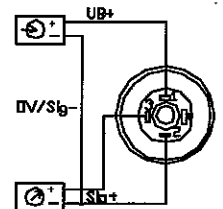
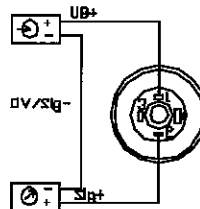
Packard
connector



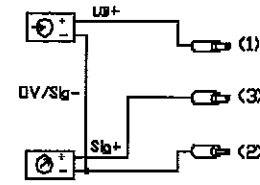
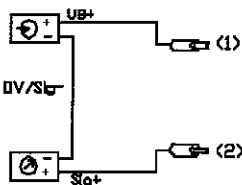
male socket
S 763



MVS/Form C,
DIN EN
175301-803



single wire
transit



Legend

power supply
 consumer

(1) red
(2) black
(3) white

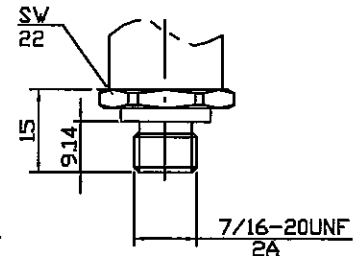
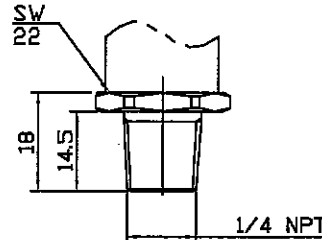
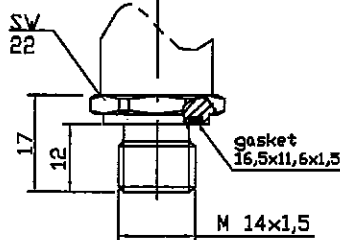
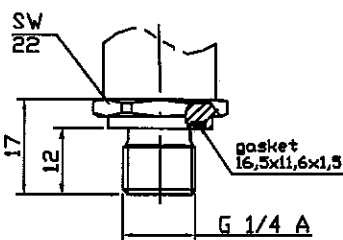
Pressure Connections

G 1/4 A; DIN 3852; Form E

M 14x1,5; DIN 3852; Form E

NPT 1/4

7/16-20UNF-2A SAE 514



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Sensortechnik

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