



**Druckmessumformer mit
Dünnschicht DMS**

**Capteur de pression avec jauges
de contrainte à couches minces**

**Pressure Transmitter with
thin-film strain gauges**

Anwendungen

Applications

Applications

- Hydraulik / Pneumatik
- Kompressoren
- Kälte / Klima
- Werkzeugmaschinen

- Hydraulique / Pneumatique
- Compresseurs
- Réfrigération / Climatisation
- Machines-outils

- Hydraulics / Pneumatics
- Compressors
- Air conditioning
- Machine tools

Vorteile

Avantages principaux

Main features

- Gute Nullpunktstabilität
- Hohe Wechsellastfestigkeit
- Kleine Bauweise
- EMV Filter, IEC 61000

- Grande stabilité du point zéro
- Une résistance mécanique élevée
- Construction miniature
- Avec filtre CEM, CEI 61000

- High longterm stability
- Excellent resistance to pressure peaks
- Small and rugged construction
- Built-in filter EMC, IEC 61000

Standardtypen / Types standard / Standard types

Messbereich Plage Range	Ausgangssignal Signal de sortie Output	Typ Type Type	Bestellnummer No de commande Ordering number	Ausgangssignal Signal de sortie Output	Typ Type Type	Bestellnummer No de commande Ordering number
0 ... 2.5 bar	4 ... 20 mA	8891.75.3315.01.19.34	NA 2.5 A	0 ... 10 V	8891.75.3315.01.17.34	NA 2.5 V
0 ... 4.0 bar	4 ... 20 mA	8891.76.3315.01.19.34	NA 4.0 A	0 ... 10 V	8891.76.3315.01.17.34	NA 4.0 V
0 ... 6.0 bar	4 ... 20 mA	8891.77.3315.01.19.34	NA 6.0 A	0 ... 10 V	8891.77.3315.01.17.34	NA 6.0 V
0 ... 10.0 bar	4 ... 20 mA	8891.78.3315.01.19.34	NA 10.0 A	0 ... 10 V	8891.78.3315.01.17.34	NA 10.0 V
0 ... 16.0 bar	4 ... 20 mA	8891.79.3315.01.19.34	NA 16.0 A	0 ... 10 V	8891.79.3315.01.17.34	NA 16.0 V
0 ... 25.0 bar	4 ... 20 mA	8891.80.3315.01.19.34	NA 25.0 A	0 ... 10 V	8891.80.3315.01.17.34	NA 25.0 V
0 ... 40.0 bar	4 ... 20 mA	8891.81.3315.01.19.34	NA 40.0 A	0 ... 10 V	8891.81.3315.01.17.34	NA 40.0 V
0 ... 100.0 bar	4 ... 20 mA	8891.83.3315.01.19.34	NA 100.0 A	0 ... 10 V	8891.83.3315.01.17.34	NA 100.0 V
0 ... 250.0 bar	4 ... 20 mA	8891.74.3315.01.19.34	NA 250.0 A	0 ... 10 V	8891.74.3315.01.17.34	NA 250.0 V
0 ... 400.0 bar	4 ... 20 mA	8891.84.3315.01.19.34	NA 400.0 A	0 ... 10 V	8891.84.3315.01.17.34	NA 400.0 V
0 ... 600.0 bar	4 ... 20 mA	8891.86.3315.01.19.34	NA 600.0 A	0 ... 10 V	8891.86.3315.01.17.34	NA 600.0 V

Andere Typen siehe auf Rückseite "Bestellinformationen"
Autres types voir "Informations pour la commande"
Other types see back page "Ordering information"

Spezifikationen

Messbereich:	0...1 bis 0...600 bar
Speisespannung (4...20mA):	10...34 V DC nominal 24 V DC
(0...10Volt):	15...30 V DC nominal 24 V DC
Genauigkeit NLH: (Beste Gerade durch Null)	± 0.3% d.S. typ.
Reproduzierbarkeit:	± 0.05% d.S.
Nenntemperaturbereich:	-25° ... 85°C
Medientemp.:	-25° ... 125°C
Lagertemperatur:	-25° ... 85°C
Temperaturkoeffizient:	
Nullpunkt:	±0.03%/K/d.S. typ. ±0.05%/K/d.S. max
Spanne:	±0.03%/K/ d.S. typ. ±0.05%/K/d.S. max.
Vibration:	6 g (20 ... 2000 Hz)
Schock:	50 g / 11 ms
Isolationswiderstand:	>10MΩ, 250 VDC
Spannungsfestigkeit:	250 V AC, 50 Hz
Anstiegszeit:	typ. 1 ms/10...90% Nennndruck
Strombegrenzung (Überlast)	ca. 50 mA
Schutzart:	IP 65, nur mit vor- schriftsmässig montier- ter Kabeldose gültig
Feuchtigkeit:	max. 95% relativ
Material Sensor:	1.4542
Gehäuse:	1.4301
Gewicht:	~ 60 g

EMV Schutz

Emission:	EN 50081-1
Immunität:	EN 50082-2
ESD:	IEC 61000-4-2, Level 3 8 kV / Gehäuse
RFI:	IEC 61000-4-3, Level 3
Burst:	IEC 61000-4-4, Level 3
Conducted immunity:	IEC 61000-4-6, Level 3

Spécifications

Etendue de mesure:	0...1 à 0...600 bar
Tension d'alimentation (4...20mA):	10...34 V DC nominale 24 V DC
(0...10Volt):	15...30 V DC nominale 24 V DC
Précision NLH:	± 0.3% E.M. typ.
Réproductibilité:	± 0.05% E.M.
Température nominal:	-25° ... 85°C
Température de fluide.:	-25° ... 125°C
Température du stock:	-25° ... 85°C
Influence thermique:	
Point zéro:	±0.03%/K/E.M.typ. ±0.05%/K/E.M.max.
Sensibilité:	±0.03%/K/E.M.typ. ±0.05%/K/E.M.max.
Vibration:	6 g (20... 2000 Hz)
Choc:	50 g / 11 ms
Résistance d'isolement:	>10MΩ, 250 VDC
Rigidité diélectrique:	250 V AC, 50 Hz
Sensibilité de réponse:	typ. 1 ms/10...90% pression nominale
Courant courts circuit (surcharge admissible)	approx. 50 mA
Protection:	IP 65, valable seulement avec fiche femelle montée selon instructions
Humidité:	95% max. relatif
Matériaux Capteur:	Z 6 CNU 17-04
Boîtier:	Z 6 CNU 18-09
Poids:	~ 60 g

CEM protection

Emission:	EN 50081-1
Immunität:	EN 50082-2
DES:	CEI 61000-4-2, Niveau 3 8 kV / boîtier
IFR:	CEI 61000-4-3, Niveau 3
Salve:	CEI 61000-4-4, Niveau 3
Immunité de conduction:	CEI 61000-4-6, Niveau 3

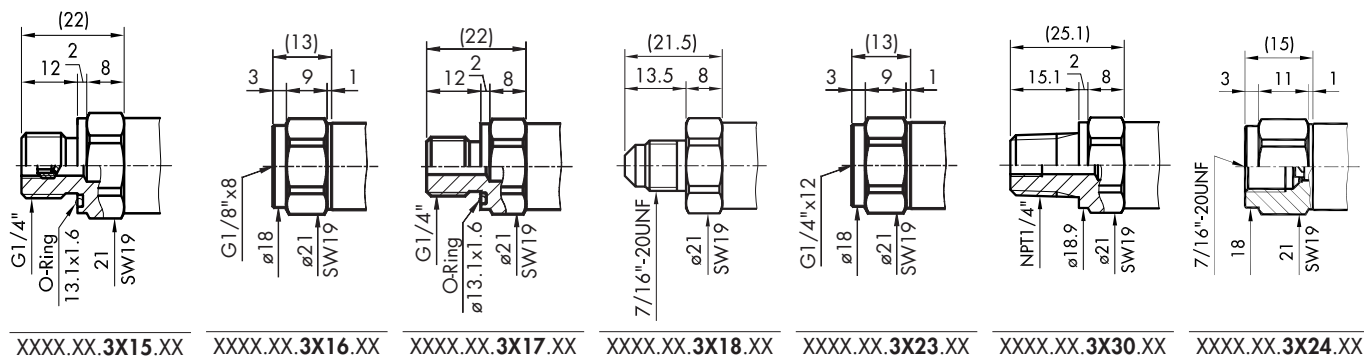
Specifications

Measuring range:	0...1 to 0...600 bar
Supply voltage (4...20mA):	10...34 V DC nominal 24 V DC
(0...10Volt):	15...30 V DC nominal 24 V DC
Accuracy NLH: (Best straight line through zero)	± 0.3% FS typ.
Repeatability:	± 0.05% FS
Operating temperature:	-25° ... 85°C
Media temperature:	-25° ... 125°C
Storage temperature:	-25° ... 85°C
Temperature coefficient:	
Zero:	±0.03%/K/FS typ. ±0.05%/K/FS max.
Span:	±0.03%/K/FS typ. ±0.05%/K/FS max.
Vibration:	6 g (20 ... 2000 Hz)
Shock:	50 g / 11 ms
Insulation resistance:	>10MΩ, 250 VDC
Electric strength:	250 V AC, 50 Hz
Rise time:	typ. 1 ms/10...90% nominal pressure
Short circuit current (over pressure)	approx. 50 mA
Protection:	IP 65, provided with female connector is mounted according to instructions
Humidity:	max. 95% relative
Material Sensor:	17-4 PH, AISI 630
Housing:	AISI 304
Weight:	~ 60 g

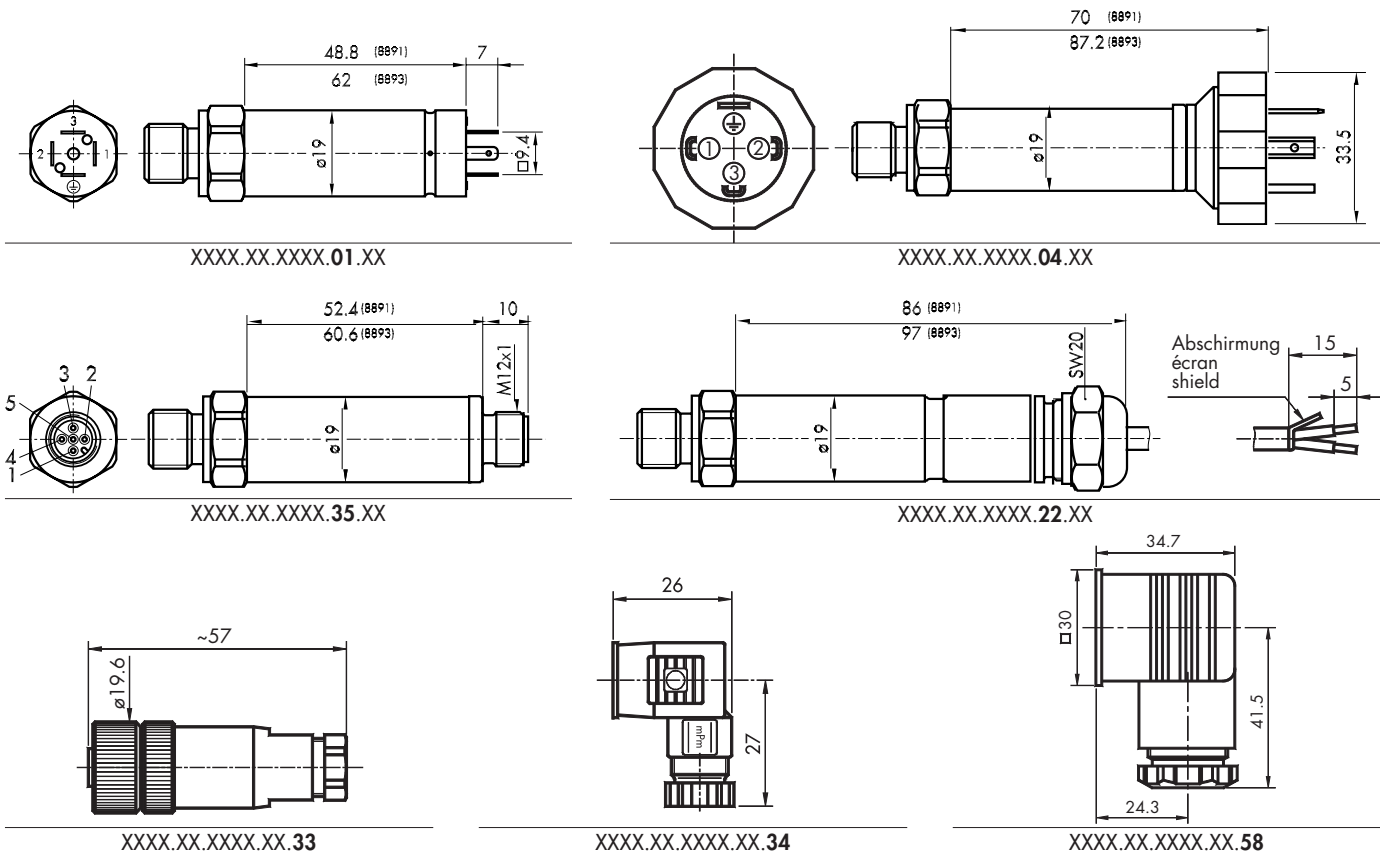
EMC protection

Emission:	EN 50081-1
Immunity:	EN 50082-2
ESD:	IEC 61000-4-2, Level 3 8 kV / housing
RFI:	IEC 61000-4-3, Level 3
Burst:	IEC 61000-4-4, Level 3
Conducted immunity:	IEC 61000-4-6, Level 3

Massbild / Cotes d'encombrement / Dimensions



Massbild / Cotes d'encombrement / Dimensions



Anschlüsse / Connexions / Connections

Schutzart / Protection ¹⁾	IP65 ¹⁾	IP65 ¹⁾	IP67 ¹⁾	IP67 ¹⁾	IP67 ¹⁾
Ausführung Exécution Execution	Industrial standard 01	DIN 43650-A 04	Cable Mat.: PUR 08	Cable Mat.: PVC 22	M12x1 5-pol. 35
Ausgangssignal Signal de sortie Output					
	2 1 ⊕	2 1 ⊕	black blue ⊕	white brown ⊕	4 1 5
	1 2 3 ⊕	1 2 3 ⊕	-	white green brown ⊕	2 4 3 5
	1 2 3 ⊕	1 2 3 ⊕	-	white green brown ⊕	2 4 3 5

¹⁾ nur mit vorschriftsmässig montierter Kabeldose gültig
valable seulement avec fiche femelle montée selon instructions
provided with female connector is mounted according to instructions

Bestellinformation / Information pour la commande / Ordering information

Standardtypen siehe Frontseite / Types standard regardez page frontal / Standard types see front page

Typ	Type	Type	relativ / relatif / relative absolut / absolue / absolute			XXXX	XX	XXXX	XX	XX	XX...
						8891					
						8893					
Bereich	0 ... 1.0 *	Überdruck	max. 3	Berstdruck	100						71
Plage	0 ... 1.6 *	Surpression	3	Surcharge destructive	100						73
Range	0 ... 2.5	Over pressure	6	Burst pressure	100						75
	0 ... 4.0		10		100						76
bar	0 ... 6.0	bar	15	bar	100						77
	0 ... 10		20		200						78
	0 ... 16		32		200						79
	0 ... 25		80		300						80
	0 ... 40		80		300						81
	0 ... 60		200		500						82
	0 ... 100		200		500						83
	0 ... 160		500		1000						85
	0 ... 250		500		1000						74
	0 ... 400		800		1500						84
	0 ... 600		1000		2000						86
Sonderbereich nach Kundenwunsch, z. B.:				-1 ... +9 bar							26
plage sur demande du client, p. ex.:				0 ... 12 bar							XX
customized ranges on request, e.g.:											
* auf Anfrage / sur demande / on request											
Sensor	Typ 07	Relativdruck / pression relatif / relative pressure									33
Capteur	Typ 07	Absolut / absolue / absolute		(Bereich / plage / range 2,5 ... 40 bar)							36
Druckanschluss				(O-Ring und Druckspitzendämpfung)							
Raccord de pression	G 1/4"	aussen / mâle / male		(joint torique et élément d'amortissement)							15
Pressure connection				(o-ring and pressure peak damping element)							
	G 1/8"	innen / femelle / female									* 16
	G 1/4"	aussen / mâle / male		(O-Ring / joint torique / o-ring)							17
	7/16"-20UNF	aussen / mâle / male									18
	G 1/4"	innen / femelle / female		(bis 250 bar / à 250 bar / to 250 bar)							* 23
				(Ventilöffner)							
	7/16"-20UNF	innen / femelle / female		(valve repos)							24
				(valve-opener)							
	NPT 1/4"	aussen / mâle / male									30
* auf Anfrage / sur demande / on request											
Ausführung	Kabel / Câble / Cable **			1,5m, PVC							22
Exécution	Gerätestecker / Embase mâle / male electrical plug			Industrial standard (contact distance 9.4mm)							01
Execution				DIN43650 A							04
				M12x1, 5-pol.							35
Ausgangssignal	Output	Load resistance	I_{SUPPLY}	U_{SUPPLY}							
Signal de sortie	4 ... 20 mA	($U_{Supply} - 10V$)/20mA		10 ... 32 V DC							19
Output	0 ... 5 V DC	$\geq 1.0 k\Omega$	≤ 15 mA	10 ... 30 V DC							14
	0 ... 10 V DC	$\geq 2.0 k\Omega$	≤ 20 mA	15 ... 30 V DC							17
	1 ... 6 V DC	$\geq 1.0 k\Omega$	≤ 15 mA	12 ... 30 V DC							16
	0 ... 20 mA*	$\leq 0.5 k\Omega$	≤ 35 mA	24V DC $\pm 20\%$							* 20
* auf Anfrage / sur demande / on request											
Zubehör	Kabeldose / fiche femelle / female electrical connector			Industrial standard							34
Accessoires				DIN43650 A							58
Accessories				M12x1, 5-pol.							33
	Kabeldose mit Kabel 1,5 m										
	fiche femelle avec cable 1,5 m			(mA: KD NAA 15 ; VDC: KD NAV 15)							
	female electrical connector with cable 1.5 m										
	** L = Kabelänge in mm / L = Longueur du câble en mm / L = Lead length in mm										XXXX

Andere Varianten auf Anfrage/ Autres variantes sur demande/ Other variations on request