

TA Transmitter

4-20mA and 0-10V



DEKA Controls TA precision transmitter

Excellent for all applications in air conditioning and refrigeration due to its pre-assembled connecting cable and M12 plug.



Product highlights:

- Precise trouble-free operation due to pressure detection by load cell with powerful output signal
- Absolute pressure measurement by comparison with sealed reference pressure standard
- Output signal 4 to 20 mA
- Calibrated pressure ranges for specific temperatures and for refrigeration and air conditioning applications
- Immune to vibration and pulsation
- CE mark in compliance with EMC Directive
- Protection class IP 67
- Quick-action connection with M12 plug connector and pre-assembled connecting cable with different lengths

Technical Specifications

Power Supply	Nominal 24 VDC Range 8 ... 30 VDC (polarity protected)
Permitted Noise and Ripple	< 1 V _{p-p}
Influence of Power Supply	< 0,02 %FS/V
Operating Current	4 .. 20 mA output, max. ≤ 24 mA
Permitted Load	$RL \leq \frac{U_b - 8,0 V}{0,02 A}$
Permitted Temperatures	Ambient, -Transport, -Storage: -40 ... +80 °C Medium: -50 ... +135°C Housing: -40 ... +85°C
Burst Pressure	150 bar*
Electrical Connection	M12-Connector
TAC Cable	Pre-assembled in several Lengths
CE marked acc. EMC-Directive Harmonized Standards	2004 / 108 / EG EN 61326-1, EN61076-2-101, EN 61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4
UL	File SA33559
Protection Class	IP 67 (EN 60529), when using TAC cables acc. this data-sheet
Weight	Version 7/16"-20UNF: 36g Braze Version: 30g
Material	Stainless steel 1.4435/AISI 316L

*Gauge Pressure

Table 1

Refrigerant	Group acc. PED 2014/68/EC	Group acc. EN378	Refrigerant	Group acc. PED 2014/68/EC	Group acc. EN378
R404A R134a R448A R449A R450A R513A R744	II	A1	R1234ze (E) R1234yf R32 R455A R454C	I	A2L
R1270 R290			I		

Other Refrigerants upon request

Selection Table 4-20mA

Typ	P/N	Output Signal	Pressure Range* (bar)	Medium Temperatur e (°C)	Max Oper. Pressure (bar)	Test Press. (bar)	Burst Press. (bar)	Pressure Connection
TA-7SS	11 002	4 ... 20 mA	-0,8 ... 7	-50 ... +135	25	27,5	150 bar	7/16-20 UNF female
TA-10SS	11 009		-1,0 ... 10		25	27,5		
TA-138SS	11 045		0 ... 13,8		33	36		
TA-18SS	11 003		0 ... 18		33	36		
TA-25SS	11 006		0 ... 25		33	36		
TA-30SS	11 004		0 ... 30		33	36		
TA-345SS	11 046		0 ... 34,5		50	55		
TA-40SS	11 007		0 ... 40		50	55		
TA-50SS	11 005		0 ... 50		50	55		
TA-60SS	11 008		0 ... 60		60	66		
TA-7SB	11 028		-0.8 ... 7		25	27,5		
TA-18SB	11 029		0 ... 18		33	36		
TA-25SB	11 033		0 ... 25		33	36		
TA-30SB	11 030		0 ... 30		33	36		
TA-40SB	11 032		0 ... 40		50	55		
TA-50SB	11 031		0 ... 50		50	55		
TA-60SB	11 034		0 ... 60		60	66		
TA-160SS	11 010		0 ... 160		160	176	360 bar	7/16-20 UNF female

Cable Connection

Type	P/N	Length	Weight	Temperature Range (static)	Temperature Range (mobile)
TAC-150S	11 011	1.5 m	50 g	-50 ... +80°C	-25 ... +80°C
TAC-300S	11 012	3.0 m	80 g		
TAC-600S	11 013	6.0 m	140 g		

Accuracy

Temperature Range	TA-7/10	TA-18/25/30/40/50/60/160
-40...80 °C	+/- 1% FS**	+/- 1,5% FS**
-20...80°C		+/- 1% FS**

** = Total deviation including hysteresis, zero point and range error due to temperature deviations, as well as nonlinearities and repeatability. Please note: % FS means percentage of full sensor scale.



Selection Table 0 – 10V

Typ	P/N	Output Signal	Pressure Range* (bar)	Medium Temperature (°C)	Max Oper. Pressure (bar)	Test Press. (bar)	Burst Press. (bar)	Pressure Connection
TA-V18SS	11 041	0-10V	0 ... 18	-50...+135	33	36	150bar	7/16-20 UNF female
TA-V30SS	11 042		0 ... 30		33	36		
TA-V50SS	11 043		0 ... 50		50	55		

Cable Connection

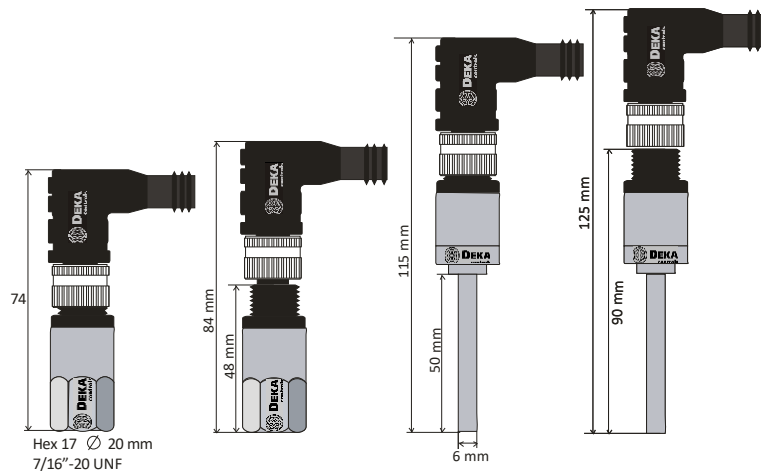
Type	P/N	Length	Weight	Temperature Range (static)	Temperature Range (mobile)
TAC-V150S	11 039	1.5 m	50 g	-40 ... +80°C	-25 ... +80°C
TAC-V300S	11 040	3.0 m	80 g		

Accuracy

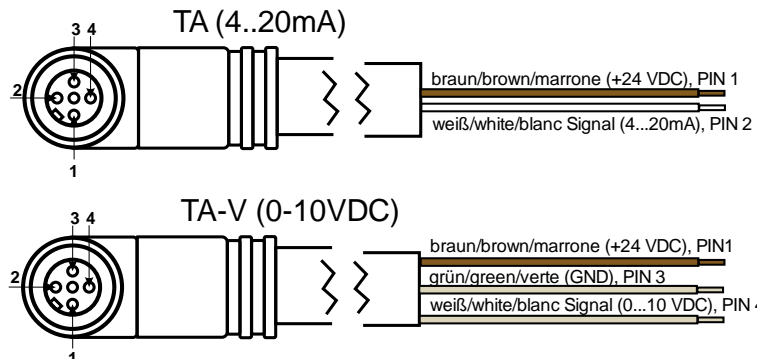
Temperature Range	TA-V18/V30/V50
-40...80 °C	+/- 1,5% FS**
-20...80°C	+/- 1% FS**

** = Total deviation including hysteresis, zero point and range error due to temperature deviations, as well as nonlinearities and repeatability. Please note: % FS means percentage of full sensor scale.

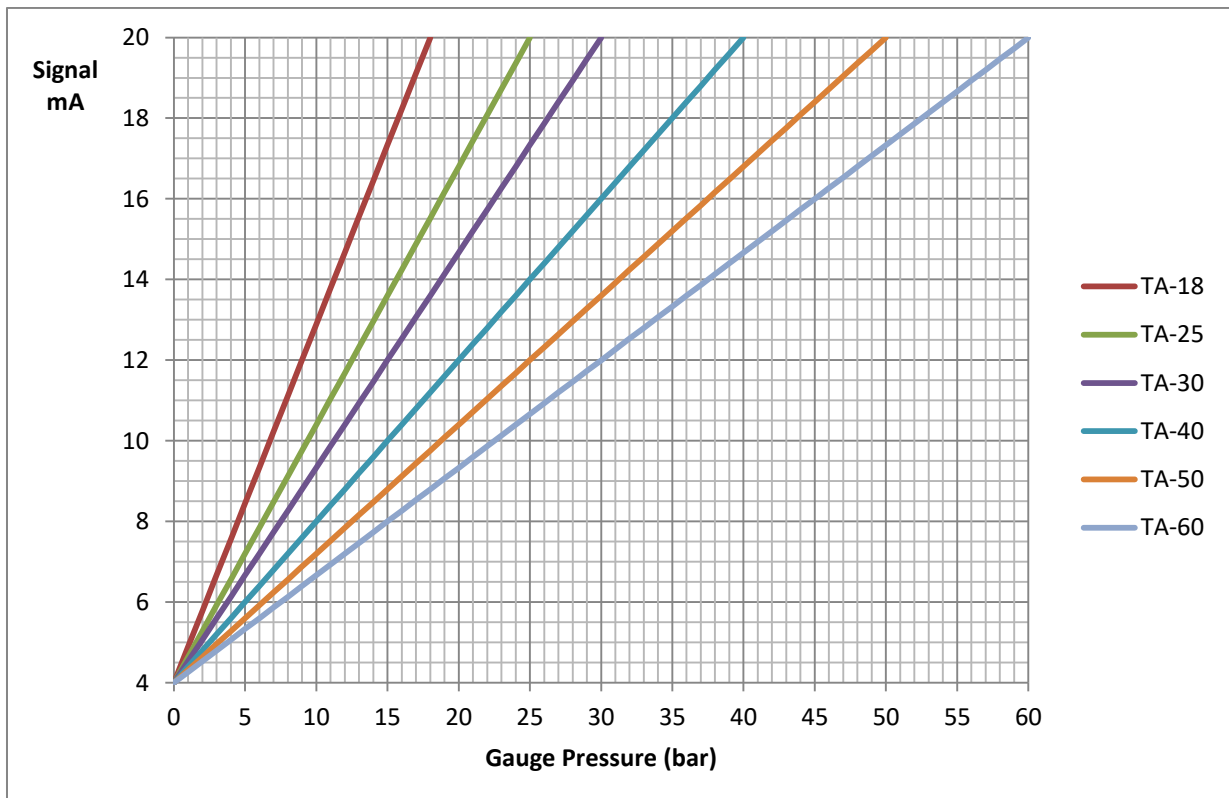
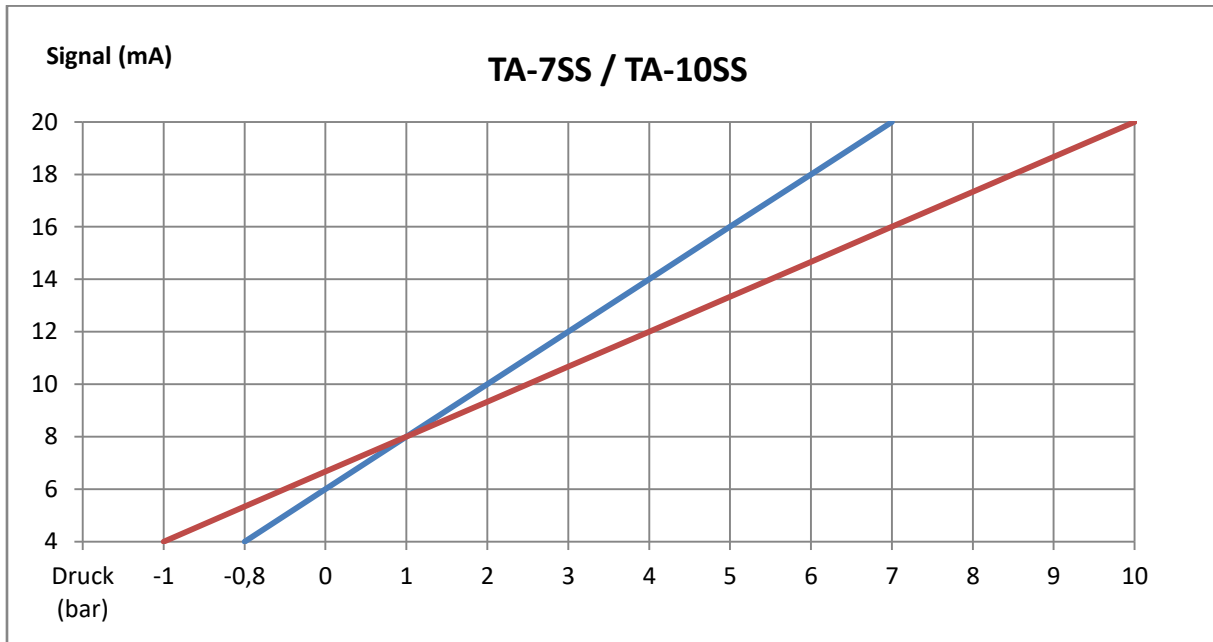
Dimensions (mm)

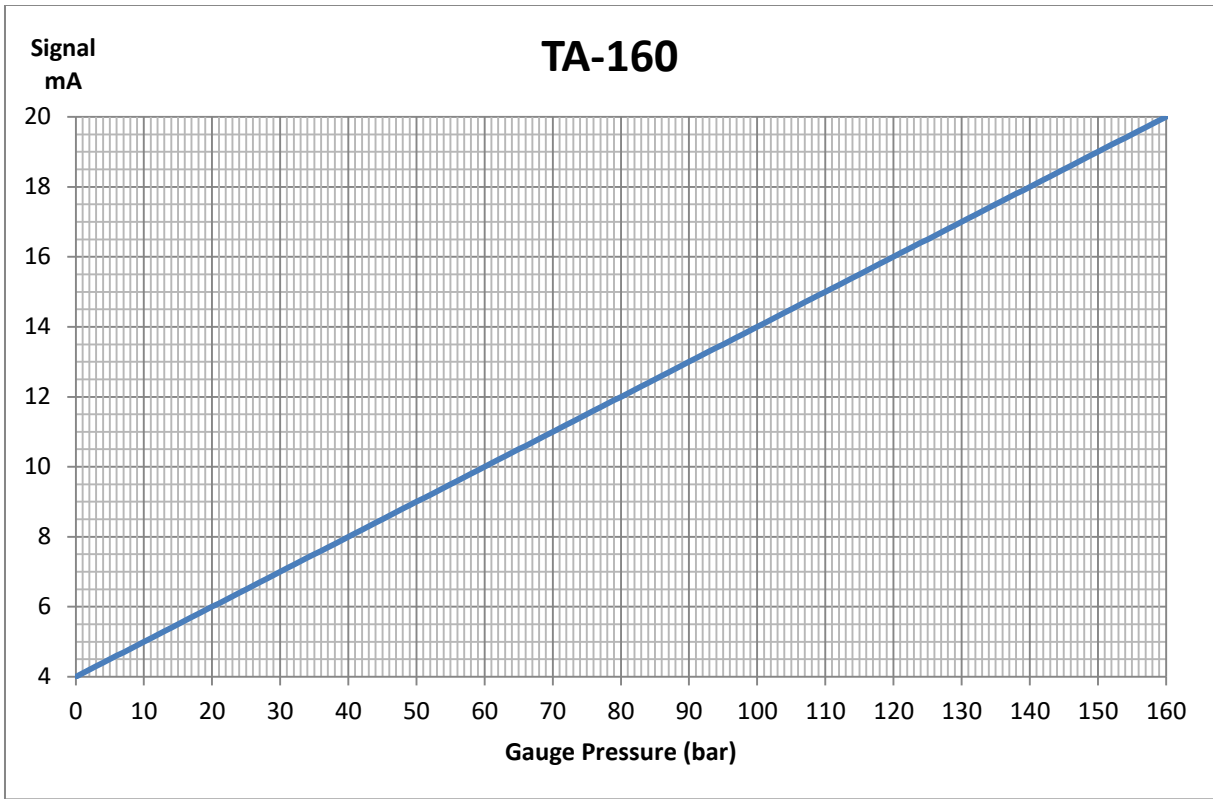


PIN configuration

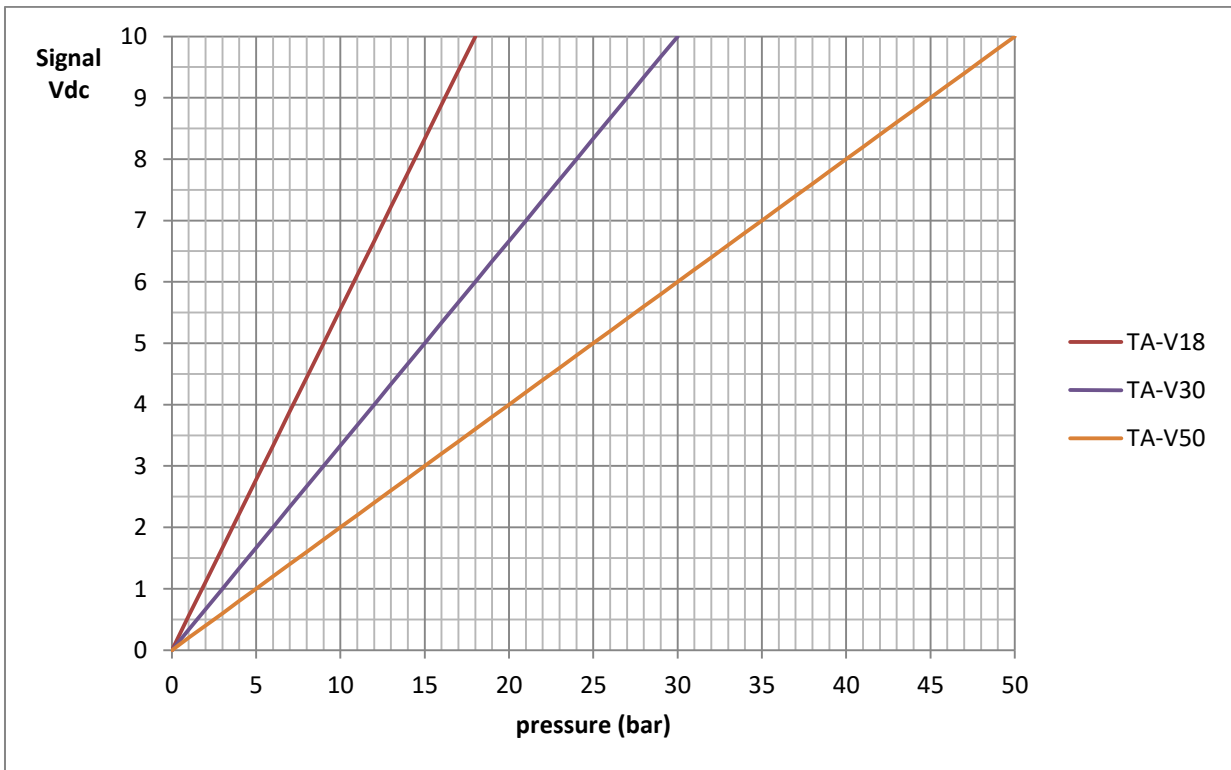


Output Signal versus pressure

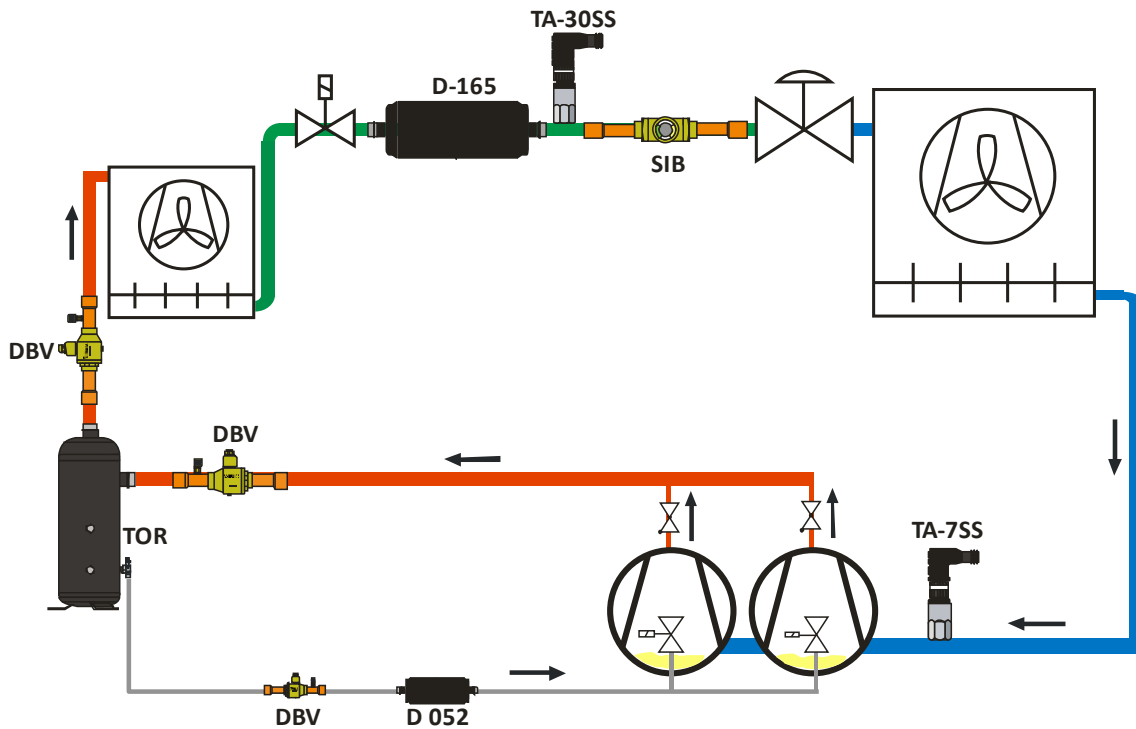




Output Signal versus pressure 0 – 10V



Cycle Diagram with other DEKA products



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