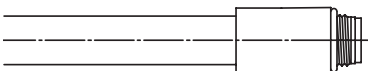
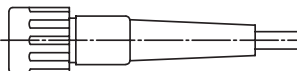
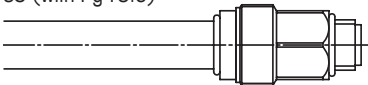
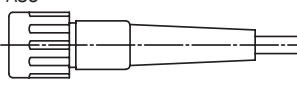
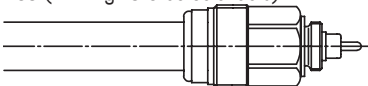
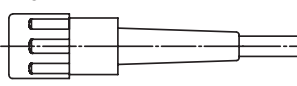
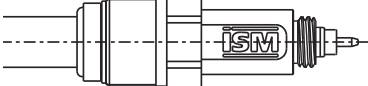
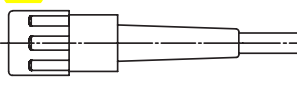
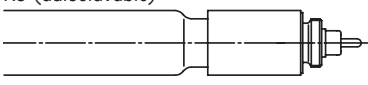
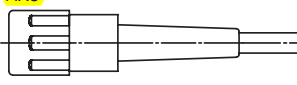
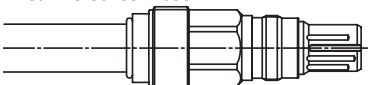
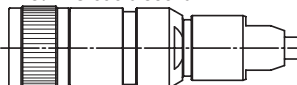
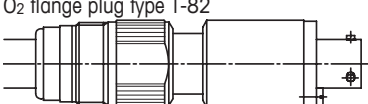
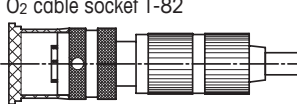


Cables and Connections/Cable Terminations

Solid Connections for Safe Operation

Cables and Connections Sensor Heads/Cable Sockets

Interconnection cables from the sensor to the transmitter play an important role in providing reliable process measurements. In addition to carrying the particular parameter signal, in some cases temperature, solution ground and supply voltages are also required. Internal cable shielding and appropriate cable connectors assure noise-free, reliable signal transfer. A wide variety of cables is available to meet the specific installation requirement. Below is a listing of common cables. The sensor head connection is shown below in the left column with the corresponding cable connection shown directly to the right. Available sensor/cable adapters are listed on the following page. Contact METTLER TOLEDO for additional configurations and custom application requirements.

Sensor Heads	Adapters (see next page)	Cable Sockets	Parameter
S7 		AS9 	pH/ORP
S8 (with Pg 13.5) 		AS9 	pH/ORP
K8S (with Pg 13.5 autoclavable) 		AK9 	pH/ORP
ISM 		AK9 	pH/ORP/DO
K9 (autoclavable) 		AK9 	pH/ORP
VP6/VP8 sensor head 		VP6/VP8 cable socket 	pH/ORP/DO/ CO ₂ /Cond
O ₂ flange plug type T-82 		O ₂ cable socket T-82 	DO



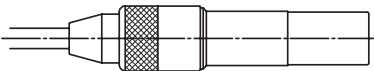

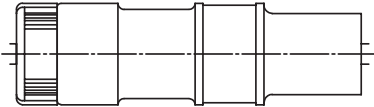
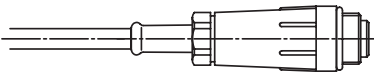
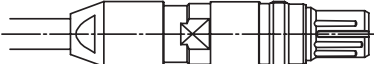

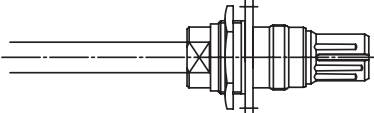
Did You Know

The VP cable blind plug keeps the cable socket dry when the sensor is removed for service.

Cable Terminations

Custom Cable Plugs to Transmitter or Appliances

Note: Standard cables are delivered with one end open for transmitter connection.
On request, cable plugs can be ordered for different appliances.
The most commonly used plugs are shown below. Ask for other types from your
METTLER TOLEDO representative.

Applications		Parameter
Appliance coupler DIN 15.50D Coaxial plug (DIN 19262) for 5 mm cable		pH/ORP
Appliance coupler BNC-50 Coaxial plug for 5 mm cable		pH/ORP
Coax connector for gas- and watertight connection of 2 coaxial 5 mm cables		pH/ORP
Cable coupler SK9 for lengthening of AS9 5 mm cable		pH/ORP
VP plug		pH/ORP/DO/CO ₂
VP blind plug		pH/ORP/DO/CO ₂
VP apparatus plug Connection as flange or bulkhead		pH/ORP/DO/CO ₂

Cable/Sensor Adapters and Cable Plugs

Description	Order Number
Adapter, to connect from K8S or K9 sensor head to AS9 cable	00 201 2003
Adapter, to connect from S7 or S8 sensor head to AK9 cable	00 201 1087
Adapter, to connect from T-82 sensor head to VP cable	52 200 940
Adapter, to connect from VP sensor head to T-82 cable	52 200 939
VP cable blind plug	52 300 252

Cables

AK9	Order Number
CABLE,AK9/1M COAX/TINNED	59 902 167
CABLE,AK9/2M COAX/TINNED	41 000 0202IG
CABLE,AK9/3M COAX/TINNED	59 902 193
CABLE,AK9/5M COAX/TINNED	59 902 213
CABLE,AK9/10M COAX/TINNED	59 902 230
CABLE,AK9/15M COAX/TINNED	53 600 145IG
CABLE,AK9/20M COAX/TINNED	52 300 204
CABLE,AK9/30M COAX/TINNED	52 300 393
CABLE,AK9/50M COAX/TINNED	52 300 394
CABLE,AK9/80M COAX/TINNED	52 300 395
CABLE,AK9/3M-ST-TRIAX7	59 902 197
CABLE,AK9/15M TRIAX/NO CONNECTOR	41 000 1006IG
CABLE,AK9/1M COAX/BNC	10 000 0103IG
CABLE,AK9/2M COAX/BNC	41 000 0203IG
CABLE,AK9/3M COAX/BNC	10 000 0303IG
CABLE,AK9/5M COAX/BNC	10 000 0503IG
CABLE,AK9/10M COAX/BNC	10 000 1003IG
CABLE,AK9/1M COAX/DIN	10 000 0100IG
CABLE,AK9/3M COAX/DIN	10 000 0300IG
CABLE,AK9/5M COAX/DIN	10 000 0500IG
CABLE,AK9/10M HT COAX/TINNED	59 902 234
CABLE,AK9/1M COAX/DIN SHORT	10 000 0144IG
CABLE,AK9/3M COAX/DIN SHORT/BRAUN	10 000 0336IG
CABLE,AK9/10M COAX/DIN/BRAUN	41 000 0254IG
CABLE,AK9/40IN TRIAX/TURCK (PH)	53 600 139IG
CABLE,AK9/40IN TRIAX/TURCK (ORP)	53 600 140IG
InPro6960i/6970i Optical Oxygen & InPro5500i CO₂ Sensor Cables	
CABLE,M12,5-Pin,RS485,2m	52 300 379
CABLE,M12,5-Pin,RS485,5m	52 300 380
CABLE,M12,5-Pin,RS485,10m	52 300 381
CABLE,M12,5-Pin,RS485,15m	52 206 422
CABLE,M12,5-Pin,RS485,25m	52 206 529
CABLE,M12,5-Pin,RS485,50m	52 206 530
UniCond ISM Sensor Cables	
CABLE, ISM 4 WIRE 1 FT	58 080 270
CABLE, UNICOND 4-WIRE 5 FT (1.5m)	58 080 271
CABLE, UNICOND 4-WIRE 10 FT (3m)	58 080 272
CABLE, UNICOND 4-WIRE 15 FT (4.5m)	58 080 273
CABLE, UNICOND 4-WIRE 25 FT (7.6m)	58 080 274
CABLE, UNICOND 4-WIRE 50 FT (15.2m)	58 080 275
CABLE, UNICOND 4-WIRE 100 FT (30.5m)	58 080 276
CABLE, UNICOND 4-WIRE 150 FT (45.7m)	58 080 277
CABLE, UNICOND 4-WIRE 200 FT (61m)	58 080 278
CABLE, UNICOND 4-WIRE 300 FT (91m)	58 080 279
AS7 Cables with S7 Connector	
CABLE,AS7/1M/DIN	10 030 100IG
CABLE,AS7/1M/BNC	10 030 109IG

VP6 Cables (-30 to 80°C / -22 to 176°F)	Order Number
CABLE,VP6-ST/1M	52 300 107
CABLE,VP6-ST/3M	52 300 108
CABLE,VP6-ST/5M	52 300 109
CABLE,VP6-ST/10M	52 300 110
CABLE,VP-ST/15M	52 300 144
CABLE,VP-ST/20M	52 300 141
CABLE,VP-ST/25M	53 600 099IG
CABLE,VP-ST/50M	53 600 112IG
CABLE,VP6-ST/1M/BNC	52 300 210
CABLE,VP6-ST/3M/BNC	52 300 211
CABLE,VP6-ST/5M/BNC	52 300 212
CABLE,VP6-ST/10M/BNC	52 300 213
CABLE,VP6-ST/15M/BNC	52 300 214
CABLE,VP6-ST/1M/DIN/BANANA X 2 FOR 1120/1	52 300 186
CABLE,VP6-ST/3M/DIN/BANANA X 2 FOR 1120/1	52 300 187
CABLE,VP6-ST/5M/DIN/BANANA X 2 FOR 1120/1	52 300 328
ADAPTER,VP SOCKET TO T82 CABLE	52 200 939
CABLE,VP-ST EXTENSION/3M	52 300 268
CABLE,VP-ST EXTENSION/5M	52 300 269
CABLE,VP-ST/1M/DIN/2 BANANA	53 600 038IG
CABLE,VP-ST/3M/DIN/2 BANANA	53 600 055IG
CABLE,VP-ST/5M/DIN/2 BANANA	53 600 044IG
CABLE,VP-ST/3M/BNC/2 BANANA	53 600 156
CABLE,VP-ST/1M/FEMALE BNC3	53 600 158
CABLE,VP-ST/3M/RT ANGLE	53 600 070IG
CABLE,VP-ST/5M/RT ANGLE	53 600 072IG
CABLE,VP-ST/10M/RT ANGLE	53 600 073IG
CABLE,VP-ST/3M/RT ANGLE/BNC	53 600 079IG
CABLE,VP-ST/3M RT ANGLE/DIN/BRAUN	53 600 086IG
CABLE,VP-O2 3M/LEMO	53 600 100
CABLE,VP-O2/10M	53 600 106IG
CABLE,VP-O2/1M/LEMO/BRAUN	53 600 108IG
CABLE,VP-O2/3M/LEMO/BRAUN	53 600 128IG
CABLE,VP/5M TRIAX/AK9	53 600 132IG
CABLE,VP-ST/3M/RT ANGLE/FEMALE VP	53 600 136IG
CABLE,VP-ST/5M/FEMALE VP	53 600 143IG
CABLE, MALE VP-ST/2M	53 600 147
High Temp VP6 Cables (-40 to 135°C / -40 to 275°F)	
CABLE,VP6-HT/1M	52 300 111
CABLE,VP6-HT/3M	52 300 112
CABLE,VP6-HT/5M	52 300 113
CABLE,VP6-HT/10M	52 300 114
CABLE,VP6-HT/15M	52 300 237
CABLE,VP6-HT/20M	53 600 118IG

Cables

VP6 Cables for InPro 3300 ISFET (non-M400)	Order Number
CABLE,VP-ST/ISFET/3M	52 300 313
CABLE,VP-ST/ISFET/5M	52 300 314
CABLE,VP-ST/ISFET/10M	52 300 315
VP6 Cables for InPro 3300 ISFET/M400	
CABLE,VP6-ST/ISFET/M400/3M	52 300 404
CABLE,VP6-ST/ISFET/M400/5M	52 300 405
CABLE,VP6-ST/ISFET/M400/10M	52 300 406
VP8 Cables (-30 to 80°C / -22 to 176°F)	
CABLE,VP8-ST/1M	52 300 353
CABLE,VP8-ST/3M	52 300 354
CABLE,VP8-ST/5M	52 300 355
CABLE,VP8-ST/10M	52 300 356
CABLE,VP8-ST/15M	52 300 357
CABLE,VP8-ST/20M	52 300 358
CABLE,VP8-ST/35M	52 300 359
CABLE,VP8-ST EXTENSION 3M	52 300 365
CABLE,VP8-ST EXTENSION 5M	52 300 366
CABLE,VP-8/1M/FEMALE VP	30 094 370
CABLE,VP-8/3M/FEMALE VP	30 094 371
High Temp VP8 Cables (-40 to 135°C / -40 to 275°F)	
CABLE,VP8-HT/1M	52 300 360
CABLE,VP8-HT/3M	52 300 361
CABLE,VP8-HT/5M	52 300 362
CABLE,VP8-HT/10M	52 300 363
CABLE,VP8-HT/15M	52 300 364
CABLE,VP-HT/3M/BNC	53 400 188IG
CABLE,VP-HT/5M/BNC	53 400 189IG
Conductivity VP Sensor Cables	
COND,PATCHCORD-VP,5 FT	58 080 201
COND,PATCHCORD-VP,10 FT	58 080 202
COND,PATCHCORD-VP,15 FT	58 080 203
COND,PATCHCORD-VP,25 FT	58 080 204
COND,PATCHCORD-VP,50 FT	58 080 205
COND,PATCHCORD-VP,75 FT	58 080 206
COND,PATCHCORD-VP,100 FT	58 080 207
COND,PATCHCORD-VP,150 FT	58 080 208
ADAPTER,VP SENSOR TO PATCHCORDS	58 080 101
GPro500 Cables	
Cable GPro500 ATEX FM 5m	30 077 735
Cable GPro500 ATEX FM 15m	30 077 736
Cable GPro500 ATEX FM 25m	30 077 737

Cables with Type 82 Connector	Order Number
CABLE,02/1M/TINNED END	32 248 7501IG
CABLE,02/3M/TINNED END	32 248 7503IG
CABLE,02/5M/TINNED END	32 248 7505IG
CABLE,02/10M/TINNED END	32 248 7510IG
CABLE,02/20M/TINNED END	32 248 7520IG
CABLE,02/25M/TINNED END	41 248 7013IG
CABLE,02/5M/DIN	32 248 7605IG
CABLE,02/3M/LEMO 3	32 248 7703IG
CABLE,02/1M/BNC	32 248 7801IG
CABLE,02/3M/BNC	32 248 7803IG
ADAPTER, T82 SOCKET TO VP CABLE	52 200 940
AS9 Cables with S7 or S8 Connector	
CABLE,AS9/1M COAX/DIN	10 001 0100IG
CABLE,AS9/1M COAX/TINNED	10 001 0102IG
CABLE,AS9/1M COAX/BNC	10 001 0103IG
CABLE,AS9/1M	59 902 245
CABLE,AS9/3M COAX/TINNED	10 001 0302IG
CABLE,AS9/3M COAX/BNC	10 001 0303IG
CABLE,AS9/5M COAX/TINNED	10 001 0502IG
CABLE,AS9/5M COAX/BNC	10 001 0503IG
CABLE,AS9/5M TRIAX/TINNED	10 001 0506IG
CABLE,AS9/10M COAX/TINNED	10 001 1002IG
CABLE,AS9/10M COAX/BNC	10 001 1003IG
CABLE,AS9/15M COAX/TINNED	53 600 144IG
CABLE, AS9 25FT COAX/BNC	41 001 1034
CABLE,AS9/18IN COAX/BNC	41 001 1038IG
Turbidity Cables	
KIT,CABLE,TURBIDITY,3M	52 800 228
KIT,CABLE,TURBIDITY,5M	52 800 229
KIT,CABLE,TURBIDITY,6M	52 800 230
KIT,CABLE,TURBIDITY,10M	52 800 231
KIT,CABLE,TURBIDITY,15M	52 800 232
KIT,CABLE,TURBIDITY,20M	52 800 233
KIT,CABLE,TURBIDITY,25M	52 800 234
KIT,CABLE,TURBIDITY,30M	52 800 235
KIT,CABLE,TURBIDITY 75M	52 800 177
COUPLINGS FOR TURB EXT CABLES (two included in every kit)	52 800 240
COUPLING BOX,IP65/NEMA 4X,TURB	52 800 241
ADAPTER, SWAGELOCK, 1/2"NPT	52 800 242
CABLE,TURBIDITY,RS 485,5M	52 800 979
CABLE,TURBIDITY,RS 485,10M	52 800 981
CABLE,TURBIDITY,RS 485,20M	52 801 005

Cables and Connections/Cable Terminations

Solid Connections for Safe Operation

Cables

Cable Availability Cross Reference Table

		AS9 Cables with S7 or S8 Connector										Conductivity VP Sensor Cables										Cables with Type 82 Connector				
		Termination	Length									Termination	Length									Termination	Length			
		Tinned Ends	1 m (3.3 ft)	3 m (9.8 ft)	5 m (16.4 ft)	10 m (32.8 ft)	1 m (3.3 ft)	3 m (9.8 ft)	5 m (16.4 ft)	10 m (32.8 ft)	1 m (3.3 ft)	Tinned Ends	1.5 m (4.9 ft)	3 m (9.8 ft)	4.5 m (14.8 ft)	7.5 m (24.6 ft)	15 m (49.2 ft)	25 m (82.0 ft)	30 m (98.4 ft)		Tinned Ends	1 m (3.3 ft)	3 m (9.8 ft)	5 m (16.4 ft)	20 m (65.6 ft)	
		Tinned Ends										Tinned Ends									Tinned Ends					
		Tinned Ends										Tinned Ends									Tinned Ends					
		BNC	BNC	BNC	BNC	DIN	DIN	DIN				Tinned Ends									Tinned Ends					
pH ISM	InPro 2000i SG																									
	InPro 3100i SG																									
	InPro 3250i SG																									
	InPro 3253i SG																									
	InPro 4260i SG																									
	InPro 4800i SG																									
	InPro 4801i SG																									
pH	InPro 2000																									
	InPro 3100																									
	InPro 3100 UD																									
	InPro 3250 SG																									
	InPro 3250																									
	InPro 3251																									
	InPro 3252																									
	InPro 3253 SG																									
	InPro 3253																									
	InPro 3300																									
	InPro 4010																									
	InPro 4260 SG																									
	InPro 4260																									
	InPro 4262																									
	InPro 4501																									
	InPro 4550																									
	InPro 4800 SG																									
	InPro 4800																									
	InPro 4801 SG																									
	InPro 4802																									
	DXK	•	•	•	•	•	•	•	•	•	•															
	DPA	•	•	•	•	•	•	•	•	•	•															
	DPAS																									
	pH/ORP ISM (1-wire)																									
	Puncture	•	•	•	•	•	•	•	•	•	•															
Dissolved Oxygen	InPro 6050																									
	InPro 6800																				•	•	•	•	•	
	InPro 6800 GAS																									
	InPro 6810																									
	InPro 6820																				•	•	•	•	•	
	InPro 6830																				•	•	•	•	•	
	InPro 6850i																									
	InPro 6900i																									
	InPro 6900																									
	InPro 6910																									
	InPro 6950i																									
	InPro 6950																									
	DO ISM (1-wire)																									
	InPro 6950 GAS																									
	O ₂ Gas ISM (1-wire)																									
CO ₂	InPro 5000																									
	InPro 5000i																									
Conductivity	InPro 7000											•	•	•	•	•	•									
	InPro 7000i											•	•	•	•	•	•									
	InPro 7001											•	•	•	•	•	•									
	InPro 7002											•	•	•	•	•	•									
	InPro 7005											•	•	•	•	•	•									
	InPro 7108											•	•	•	•	•	•									
Order Number		10 001 0102	10 001 0302	10 001 0502	10 001 1002	10 001 0103	10 001 0303	10 001 0503	10 001 1003	10 001 0100	10 001 0300	10 001 0500	10 001 1000	58 080 201	58 080 202	58 080 203	58 080 204	58 080 205	58 080 206	58 080 207	32 248 7501	32 248 7503	32 248 7505	32 248 7510	32 248 7520	

* In combination with M400 transmitter only.