

# **CABLES & PIGTAILS**

## **CABLES**

Eltra cables are high quality screened cables to provide reliable trasmission between the sensor and the subsequent electronics.

Thanks to the different cable materials (PVC or PUR, for fixed or flexible installation), to the rugged and compact design they can be used in harsh operating conditions. Eltra provides non-assembled, partially or fully assembled cables as accessories with preferred cable lengths are 1,5/2/3/5/10 m.









Description	Technical data	Operating temperature	Conductor colours
SPZ.CAVO 5 POLI xx M / 5 CORES CABLE xx M 5 cores PVC flame retardant shielded cable	Outer sheat material PVC - silver grey diameter 5,2 ± 0,15 mm  Conductors sheat material PVC Conductors cross section AWG 24 / 0,22 mm <sup>2</sup> Shield AL/PET foil + drain wire	Fixed installation -25° +85°C (-13° +185°F) Bending radius min 60 mm Minimum temperature installation -5°C (+23°F)	red black green yellow blue







Description	Technical data	Operating temperature	Conductor colours
SPZ.CAVO 5 POLI CAT. xx M / 5 CORES FLEX CABLE xx M 5 cores PUR drag chain shielded cable	Outer sheat material PUR - black diameter 5,2 ± 0,15 mm  Conductors sheat material PVC Conductors cross section AWG 24 / 0,22 mm²  Braid tinned copper 90% coverage	Flexible installation -20° +80°C (-4° +185°F) Bending radius min 60 mm Travel speed 100 m/min max Acceleration 5 m/s² max Minimum temperature installation -5°C (+23°F)	red black green yellow blue







Description	Technical data	Operating temperature	Conductor colours
SPZ.CAVO 8 POLI xx M / 8 CORES CABLE xx M 8 cores PVC flame retardant shielded cable	Outer sheat material PVC - silver grey diameter $5.7 \pm 0.15$ mm   Conductors sheat material PVC   Conductors cross section AWG 24 / $0.22$ mm <sup>2</sup> Shield AL/PET foil + drain wire	Fixed installation -25° +85°C (-13° +185°F) Bending radius min 60 mm Minimum temperature installation -5°C (+23°F)	red orange black white green yellow blue brown or grey







Description	Technical data	Operating temperature	Conductor colours
SPZ.CAVO 8 POLI HT xx M / 8 CORES HT CABLE xx M 8 cores PVC flame retardant high temperature shielded cable	Outer sheat material PVC - anthracite grey Outer diameter $5.6 \pm 0.1 \text{ mm}$ Conductors sheat material PVC Conductors cross section AWG 24 / 0,22 mm <sup>2</sup> Shield AL/PET foil + drain wire	Fixed installation -40° +105°C (-40° +221°F) Bending radius min 60 mm Minimum temperature installation -5°C (+23°F)	red orange black white green yellow blue grey











Description	Technical data	Operating temperature	Conductor	colours
SPZ.CAVO 8 POLI TP xx M / 8 CORES TP CABLE xx M 8 cores twisted pairs PVC flame retardant shielded cable		Fixed installation -30° +105°C (-22° +221°F) Bending radius min 60 mm Minimum temperature installation -5°C (+23°F)	red black yellow orange	green brown white red/blue







Description	Technical data	Operating temperature	Conductor colours
SPZ.CAVO 8 POLI CAT. xx M / 8 CORES FLEX CABLE xx M 8 cores PUR drag chain shielded cable	Outer sheat material PUR - black diameter 5,7 +0 / -0,15 mm  Conductors sheat material PVC Conductors cross section AWG 26 / 0,14 mm <sup>2</sup> Braid tinned copper 90% coverage	Flexible installation -20° +85°C (-4° +185°F) Bending radius min 60 mm Travel speed 100 m/min max Acceleration 5 m/s² max Minimum temperature installation -5°C (+23°F)	red orange black white green yellow blue brown







Description	Technical data	Operating temperature	Conductor	colours
SPZ.CAVO 12 POLI xx M / 12 CORES CABLE xx M 12 cores PVC flame retardant shielded cable	Outer sheat material PVC - silver grey Outer diameter $6.5 \pm 0.1$ mm Conductors sheat material PVC Conductors cross section AWG 24 / $0.22$ mm <sup>2</sup> Shield AL/PET foil + drain wire	Fixed installation -20° +85°C (-4° +185°F) Bending radius min 60 mm Minimum temperature installation -5°C (+23°F)	red black green yellow blue brown	orange white grey violet grey/pink red/blue







Description	Technical data	Operating temperature	Conductor	colours
SPZ.CAVO 16 POLI xx M / 16 CORES CABLE xx M 16 cores PVC flame retardant shielded cable	Outer sheat material PVC - grey Outer diameter 7 mm approx  Conductors sheat material PVC Conductors cross section AWG 26 / 0,14 mm²  Braid tinned copper 85% coverage	Fixed installation -40° +85°C (-40° +185°F) Bending radius min 50 mm Minimum temperature installation -5°C (+23°F)	red black green yellow blue brown orange white	grey violet grey/pink red/blue white/green brown/green white/yellow yellow/brown



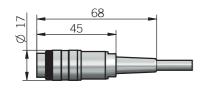






Description	Technical data	Operating temperature	Conductor c	olours
SPZ.CAVO 32 POLI xx M / 32 CORES CABLE xx M 32 cores PVC flame retardant shielded cable	Outer sheat material PVC - grey Outer diameter 10 mm approx  Conductors sheat material PVC Conductors cross section AWG 26 / 0,14 mm²  Braid tinned copper 85% coverage	Fixed installation -40° +85°C (-40° +185°F) Bending radius min 50 mm Minimum temperature installation -5°C (+23°F)	red black green yellow blue brown pink white grey violet grey/pink red/blue white/green brown/green white/yellow yellow/brown	white/grey brown/grey white/pink brown/pink white/blue brown/blue white/red brown/red white/black brown/black grey/green yellow/grey pink/green yellow/pink green/blue yellow/blue

## **PIGTAILS WITH PLUG**

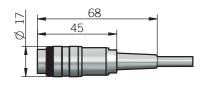




## PINOUT FRONT VIEW



Description	Ordering code example	Electrical interfaces supported	Mating with
PR+C Pigtail with metal/plastic 5 pin C091 M16 IP40 plug connector	ER30E500Z5/28P4X3 <b>PR+C.162</b>	NPN open collector (with or without zero) push-pull (with or without zero)	CONN.C05FV (P/N 94990135)

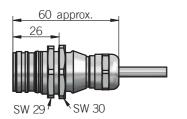




#### PINOUT FRONT VIEW



Description	Ordering code example	Electrical interfaces supported	Mating with
PR+C Pigtail with metal/plastic 8 pin C091 M16 IEC 60130-9 IP40 plug connector	EH30M1000Z5L6X6 <b>PR+C.162</b>	line driver (with or without zero) RS-422 (with or without zero)	CONN.C08FV (P/N 94990142)





## PINOUT FRONT VIEW



Description	Ordering code example	Electrical interfaces supported	Mating with
PR+H (incremental) / PR+HA (absolute)	ER58B1000Z5L6S3 <b>PR+H.162</b>	NPN open collector (with or without zero) push-pull (with or without zero) line driver (with or without zero) RS-422 (with or without zero) SSI (with or without reset)	CONN.H12FV CCW
Pigtail with metal 12 pin M23 CCW plug connector	EMA36B12G8/30SPZE6X8 <b>PR+HA.162</b>		(P/N 94990137)









## PINOUT FRONT VIEW



Description	Ordering code example	Electrical interfaces supported	Mating with
PR+M (incremental) / PR+MC (absolute) Pigtail with metal 7 pin MIL plug connector	ER38F500S5L10XX <b>PR+M.162</b> EM450F1024G8/30SPX15X3 <b>PR+MC 162</b>	NPN open collector (with or without zero) push-pull (with or without zero) line driver (without zero) RS-422 (without zero) SSI (without reset)	CONN.M07FV (P/N 94990121)

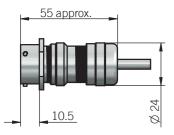




#### PINOUT FRONT VIEW



Description	Ordering code example	Electrical interfaces supported	Mating with
PR+M (incremental) / PR+MD (absolute)	EH80C1024Z5/28L10X6 <b>PR+M.162</b>	line driver (with zero) RS-422 (with zero) SSI (with reset)	CONN.M10FV
Pigtail with metal 10 pin MIL plug connector	EAMR63D12/13B8/30SZE10X <b>PR+MD.162</b>		(P/N 94990119)





#### PINOUT FRONT VIEW



Description	Ordering code example	Electrical interfaces supported	Mating with
PR+M (incremental) / PR+MA (absolute)	EF36K6L1000Z5L10X6 <b>PR+M.162</b>	NPN open collector (EF series, with or without zero) push-pull (EF series, with or without zero ) RS-422 (EF series, with or without zero) Bit parallel (singleturn models)	CONN.M19FV
Pigtail with metal 19 pin MIL plug connector	EMA50F1024G8/30UPX12X3 <b>PR+MA.162</b>		(P/N 94990123)





#### PINOUT FRONT VIEW



Description	Ordering code example	Electrical interfaces supported	Mating with
PR+M12 Pigtail with M12 5 pin M12 A-coded plug connector	ER40A150S5/28P6X6 <b>PR+M12.162</b> EAL58C16B12/30V010X10X <b>PR+M12.162</b>	NPN open collector (with or without zero) push-pull (with or without zero) Analogue (voltage or current 3 wires)	CONN.M12FV 5P (P/N 94990117)

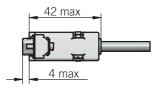




#### PINOUT FRONT VIEW



Description	Ordering code example	Electrical interfaces supported	Mating with
PR+M12	EMI38F10Z5/30RS6XX <b>PR+M12.162</b>	line driver (with or without zero) RS-422 (with or without zero) SSI (with or without reset) Analogue (current 4 wires)	CONN.M12FV 8P
Pigtail with 8 pin M12 A-coded plug connector	EMA50A4096B8/30SPZE6X3 <b>PR+M12.162</b>		(P/N 94990118)



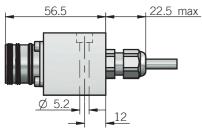


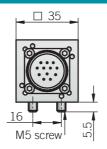
## PINOUT FRONT VIEW

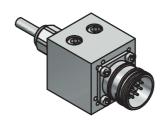


Description	Ordering code example	Electrical interfaces supported	Mating with
PR+V Pigtail with plastic 9 pin SUB-DE plug connector	ER63A250Z5/28P10X6 <b>PR+V.162</b>	NPN open collector (with or without zero) push-pull (with or without zero) line driver (with or without zero) RS-422 (with or without zero)	CONN.M10FV (P/N 94990119)

## PIGTAIL WITH CONNECTOR BLOCK & PLUG





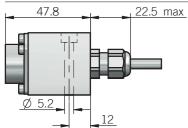


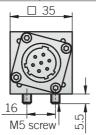


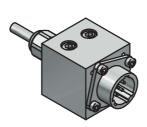
n.2 M5x40 screws included

n.2 M5x40 screws included

Description	Ordering code example	Electrical interfaces supported	Mating with
HR.445 Pigtail with black anodized aluminium connector block & 12 pin M23 CCW IP67 plug	EH80P2048Z5L14X3 <b>HR.162+445</b>	NPN open collector (with or without zero) push-pull (with or without zero) line driver (with or without zero) RS-422 (with or without zero)	CONN.H12FV CCW (P/N 94990137)







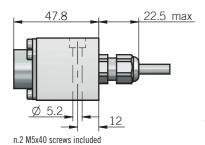


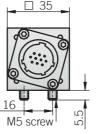
Description	Ordering code example	Electrical interfaces supported	Mating with
JR.445 Pigtail with black anodized aluminium connector block & 7 pin JIS-C-5432 IP40 plug	EH30M1024S5L6X3 <b>JR.162+445</b>	NPN open collector (with or without zero) push-pull (with or without zero) line driver (without zero) RS-422 (without zero)	CONN.J07FV (P/N 94990131)

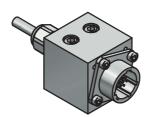




## ACCESSORIES | CABLES AND PIGTAILS



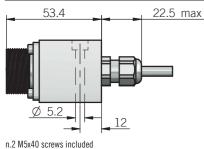


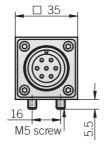


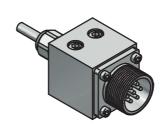


 
 Description
 Ordering code example
 Electrical interfaces supported
 Mating with

 JR.445 Pigtail with black anodized aluminium connector block & 10 pin JIS-C-5432 IP40 plug
 ER40A2000Z5/28L6X6JR.162+445
 line driver (with zero) RS-422 (with zero)
 CONN J10FV (P/N 94990133)

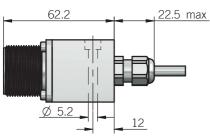


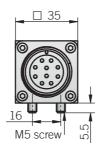


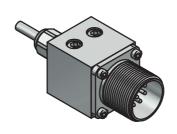




Description	Ordering code example	Electrical interfaces supported	Mating with	
MR.445 Pigtail with black anodized aluminium connector block & 7 pin IP67 MIL plug	EL63GB100Z5/28P15X3 <b>MR.162+445</b>	NPN open collector (with or without zero) push-pull (with or without zero) line driver (without zero) RS-422 (without zero)	CONN.M07FV (P/N 94990121)	



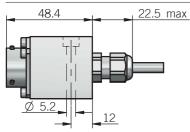


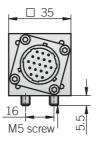




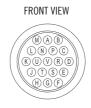
n.2 M5x40 screws included

Description	Ordering code example	Electrical interfaces supported	Mating with
MR.445 Pigtail with black anodized aluminium connector block & 10 pin IP67 MIL plug	ER38F1000Z5/30L10XX <b>MR.162+445</b>	line driver (with zero) RS-422 (with zero)	CONN.M10FV (P/N 94990119)









n.2 M5x40 screws included

Description Description	Ordering code example	Electrical interfaces supported	Mating with
MR.445 Pigtail with black anodized aluminium connector block & 19 pin IP67 MIL plug	EF36K6L1000Z5L10X6MR.162+445	NPN open collector (EF series, with or without zero) push-pull (EF series, with or without zero ) RS-422 (EF series, with or without zero)	CONN.M19FV (P/N 94990123)

dimensions in mm

