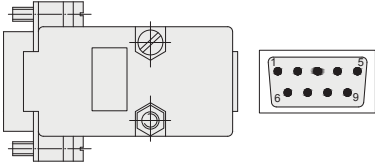


ENCODER ELECTRICAL CONNECTION

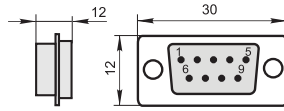
FOR ~ 11 μ A

9-PINS FLAT CONNECTOR D9, MALE

For cable



For housing

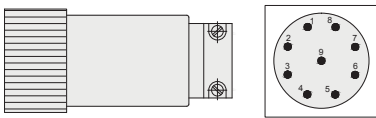


8	4	7	3	6	2	5	9	1
I ₁ +	I ₁ -	I ₂ +	I ₂ -	I ₀ +	I ₀ -	+5V	0V	Shield
Green	Yellow	Blue	Red	Grey	Pink	Brown	White	Shield

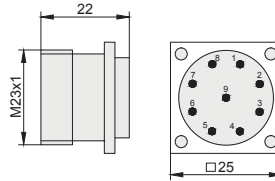
* Shield is connected to the housing of connector

9-PINS ROUND CONNECTOR C9, MALE

For cable



For housing

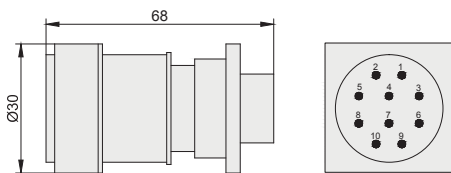


1	2	5	6	7	8	3	4	9
I ₁ +	I ₁ -	I ₂ +	I ₂ -	I ₀ +	I ₀ -	+5V	0V	Shield
Green	Yellow	Blue	Red	Grey	Pink	Brown	White	Shield

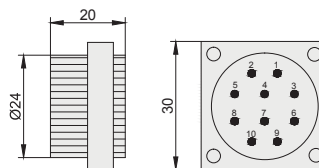
* Shield is connected to the housing of connector

10-PINS ROUND CONNECTOR ONC, MALE

For cable



For housing



I ₁ +	I ₁ -	I ₂ +	I ₂ -	I ₀ +	I ₀ -	+5V	0V	Shield
2	5	8	7	6	10	4	9	1
Green	Yellow	Blue	Red	Grey	Pink	Brown	White	Shield

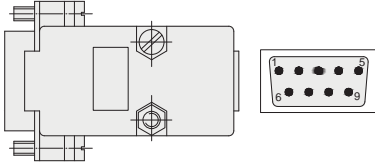
* Shield is connected to the housing of connector

ENCODER ELECTRICAL CONNECTION

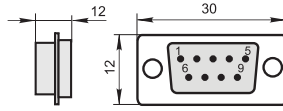
FOR ~ 1Vpp; TTL; HTL

9-PINS FLAT CONNECTOR D9, MALE

For cable



For housing

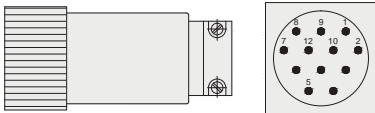


Pin number	8	4	7	3	6	2	5	9	1
Color	Pink	Grey	White	Brown	Yellow	Green	Red	Blue	Shield
AV (~ 1V)	A+	A-	B+	B-	R+	R-	+5V	0V	Shield
TTL U = +5V	U1	Ū1	U2	Ū2	U0	Ū0	+5V	0V	Shield
HTL U = +(10...30)V	U1	Ū1	U2	Ū2	U0	Ū0	+(10...30)V	0V	-

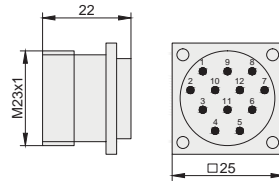
* Shield is connected to the housing of connector

12-PINS ROUND CONNECTOR C12, MALE

For cable



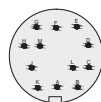
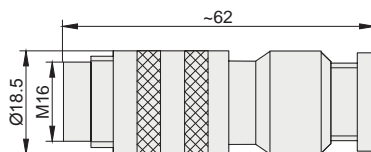
For housing



Pin number	5	6	8	1	3	4	12	10	2	11
Color	Pink	Grey	White	Brown	Yellow	Green	Red	Blue	Black	Violet
AV (~ 1V)	A+	A-	B+	B-	R+	R-	+5V	0V	Sensor +5V	Sensor 0V
TTL U = +5V	U1	Ū1	U2	Ū2	U0	Ū0	+5V	0V	Sensor +5V	Sensor 0V
HTL U = +(10...30)V	U1	Ū1	U2	Ū2	U0	Ū0	+(10...30)V	0V	Sensor +(10...30)V	Sensor 0V

* Shield is connected to the housing of connector

12-PINS ROUND CONNECTOR B12, MALE



Pin number	C	D	E	L	G	H	K	B	A
Color	Pink	Grey	White	Brown	Yellow	Green	Red	Blue	shield
AV (~ 1V)	A+	A-	B+	B-	R+	R-	+5V	0V	shield
TTL U = +5V	U1	Ū1	U2	Ū2	U0	Ū0	+5V	0V	shield
HTL U = +(10...30)V	U1	Ū1	U2	Ū2	U0	Ū0	+(10...30)V	0V	shield

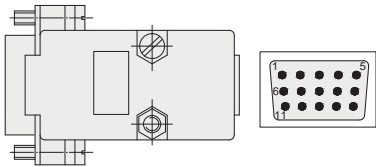
* Shield is connected to the housing of connector

ENCODER ELECTRICAL CONNECTION

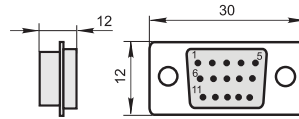
FOR ~ 1Vpp; TTL; HTL

15-PINS FLAT CONNECTOR D15, MALE

For cable



For housing

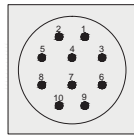
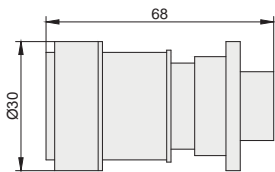


Pin number	3	13	4	14	5	15	1	2	6
Color	Pink	Grey	White	Brown	Yellow	Green	Red	Blue	Shield
TTL U = +5V	U1	Ū1	U2	Ū2	U0	Ū0	+5V	0V	Shield

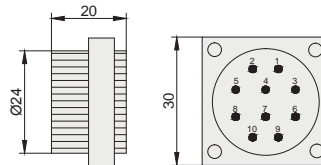
* Shield is connected to the housing of connector

10-PINS ROUND CONNECTOR ONC, MALE

For cable



For housing



U = +5V±5%

Pin number	1	2	3	4	10	9	5	6	7
Color	Pink	Grey	White	Brown	Yellow	Green	Red	Blue	Shield
TTL U = +5V	U1	Ū1	U2	Ū2	U0	Ū0	+5V	0V	Shield

* Shield is connected to the housing of connector

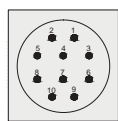
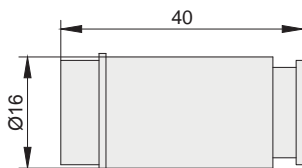
U = +5 and +15V (rotary encoders A58B for replacement of BE178 only)

Pin number	1	2	3	4	10	9	8	5	6	7
TTL U = 5/15V	U1	Ū1	U2	Ū2	U0	Ū0	+5V	+15V	0V	Shield

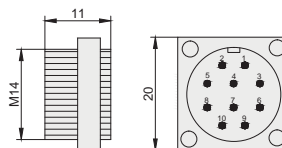
* Shield is connected to the housing of connector

10-PINS ROUND CONNECTOR RS10, MALE

For cable



For housing



Pin number	5	8	3	6	10	1	2	9	4
Color	Pink	Grey	White	Brown	Yellow	Green	Red	Blue	Shield*
TTL U = +5V	U1	Ū1	U2	Ū2	U0	Ū0	+5V	0V	Shield

* Shield is connected to the housing of connector