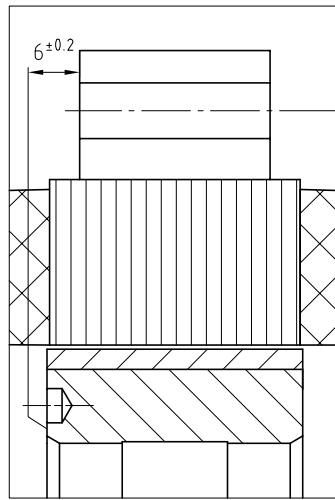


Mounting condition

Z (1:1)

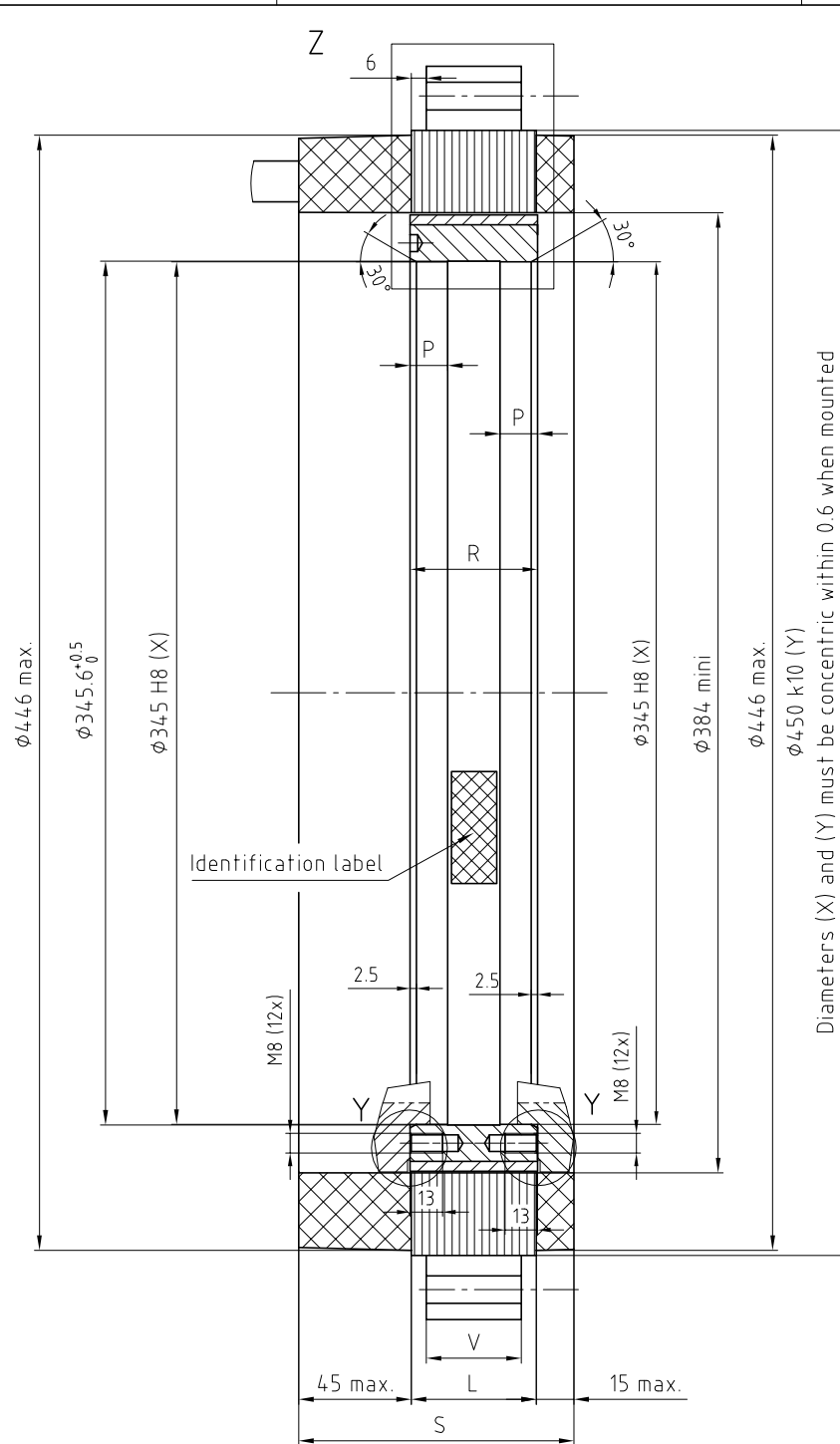
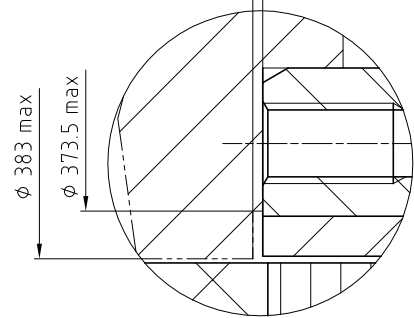


Detail: Y

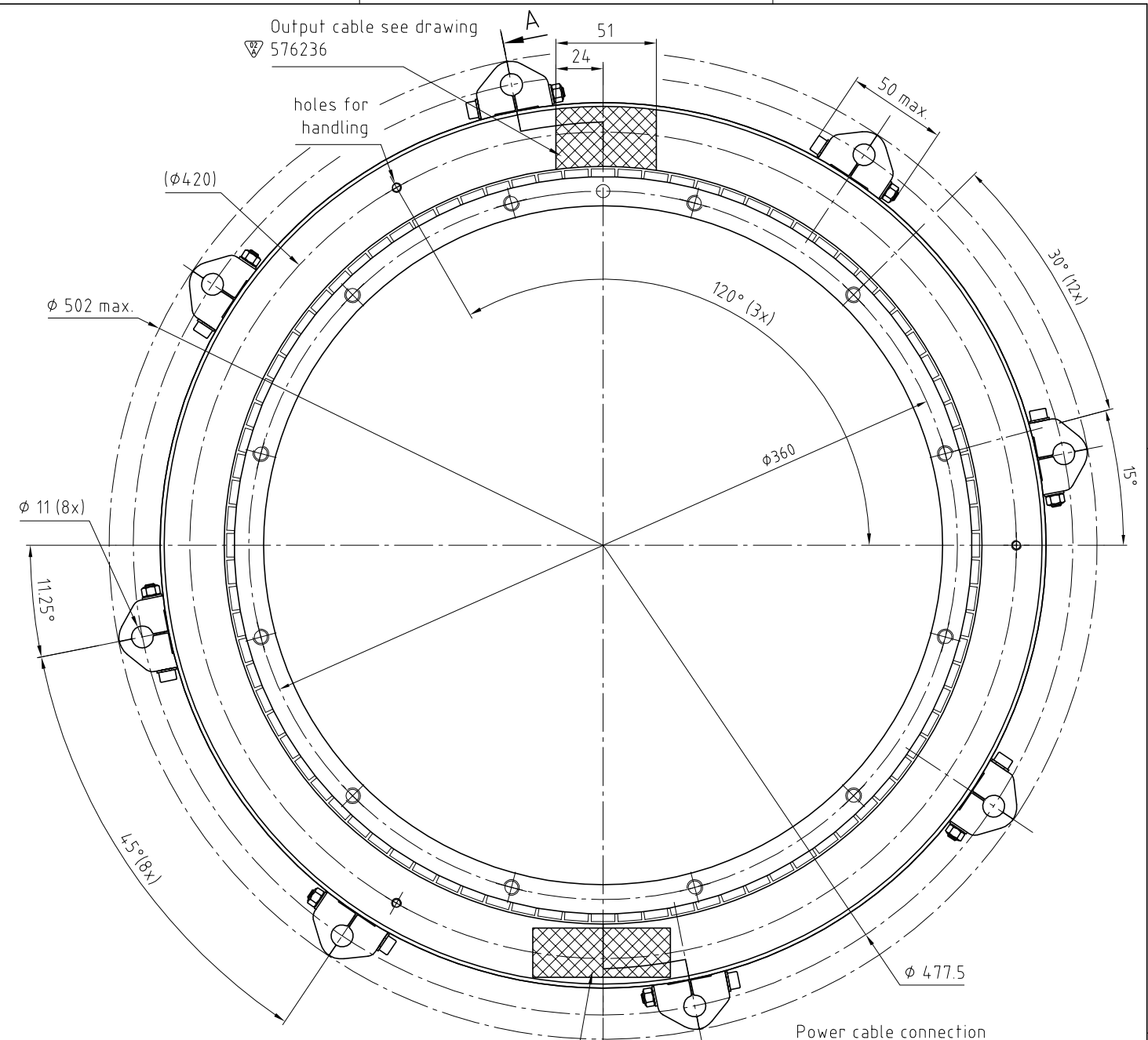
Magnets safety clearance

Y (2:1)

1 min

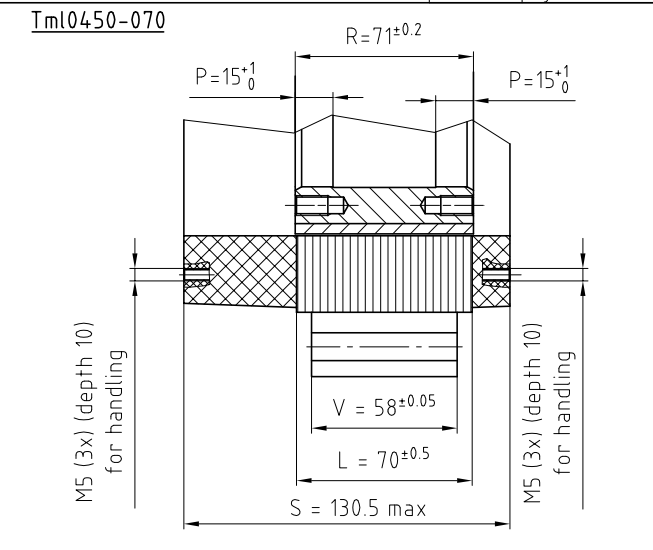
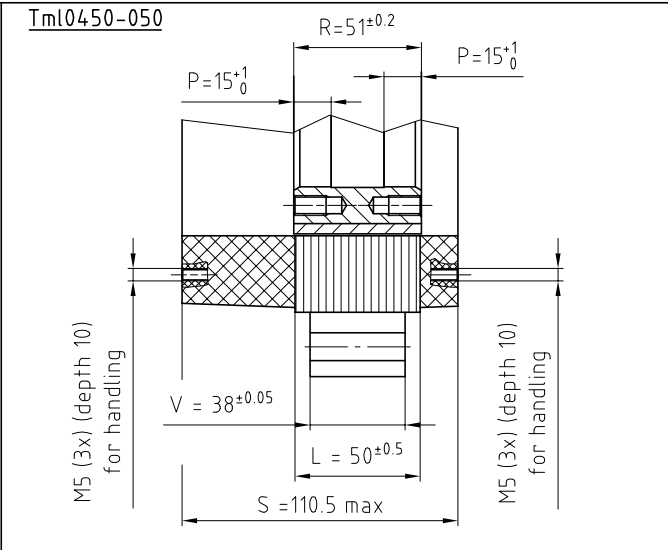
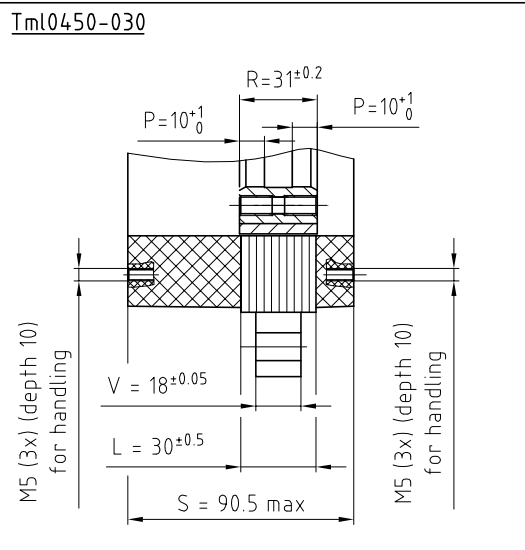


Diameters (X) and (Y) must be concentric within 0.6 when mounted



φ450	k10	+0.25	450.25
φ345	H8	+0.089	345.089
Cote	Ajustement		

- Phase 1 = Wire 1
 Phase 2 = Wire 2
 Phase 3 = Wire 3
 Ground = Wire yellow-Green
 Neutral = Wire 5 or Br1 or White
 Not connected = Wire 6 or Br2 or Black



For temperature sensor configuration, see Handbook

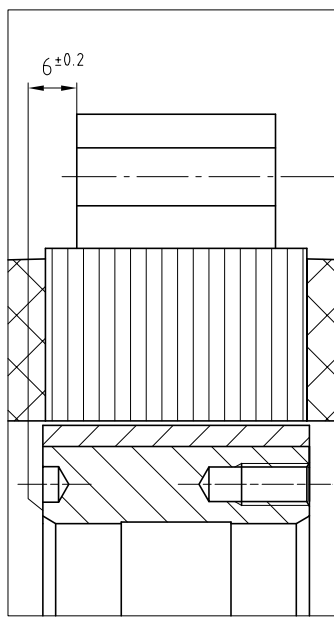
ECO N°	Nom	Date	Description
C29035	MBO	18.10.2012	
Matière: -			
Principe de tolérancement de base ISO 8015 et tolérance générale selon ISO 2768-mK			
Remarque: -	Annexe: -	Dimension nominale	Rayon Chanfrein
		Linéaire	α
		Dimension nominale	Equivalence rugosité
		0,5 ... 3	50 N12
		> 3 ... 6	25 N11
		> 6 ... 30	12,5 N10
		> 30 ... 120	6,3 N9
		> 120 ... 400	3,2 N8
		> 400 ... 1000	1,6 N7
		> 1000 ... 2000	0,8 N6
			0,4 N5
			0,2 N4
			0,1 N3
			0,05 N2
			0,025 N1
Arêtes de formes ISO 13715		Torque motor Tml0450-030 / 050 / 070	
I-0,3		Auteur	
+0,3		S. Perrot	
		Vérificateur	
		Libérateur	
		25.04.06	
Interface drawing		Ancien n°: 0526m-140-02b	
		Version	
		Revision	
		Feuille	
		Page	
Echelle		589168 - 02- A-01	
Format		1/1	
Projection			
Echelle		1:2	
Ancien n°: 0526m-140-02b		Version	
Revision		Feuille	
Page			



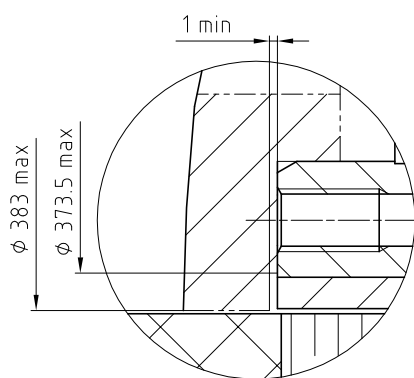
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Mounting condition

Z (1:1)



Detail: Y
Magnets safety clearance
Y (1.5:1)



φ446 max.

φ345.6^{+0.5}

φ345 H8 (X)

φ345 H8 (X)

φ384 mini

φ446 max.

φ450 k10 (Y)

Diameters (X) and (Y) must be concentric within 0.6 when mounted

Identification label

M8 (23x)

2.5

2.5

M8 (24x)

Y

13

13

45 max

L

15 max

S

V

R

P

P

Z

D

C

B

A

holes for handling

(φ420)

Output cable
see drawing
576236

02
A

φ 502 max.

50 max.

120°(3x)

15°(24x)

φ360

11.25°

22.5°(16x)

φ 477.5

φ 11 (16x)

Power cable connection

- Phase 1 = Wire 1
- Phase 2 = Wire 2
- Phase 3 = Wire 3
- Ground = Wire yellow-Green
- Neutral = Wire 5 or Br1 or White
- Not connected = Wire 6 or Br2 or Black

02
A

Identification label

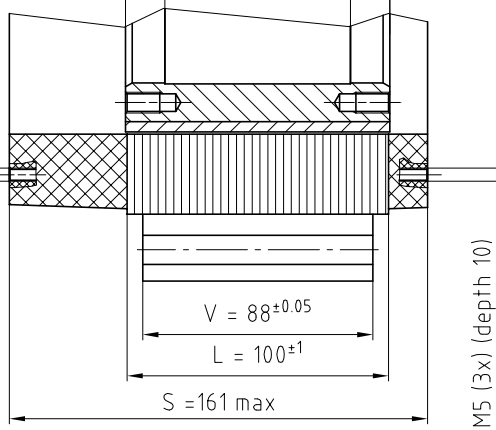
For temperature sensor configuration, see Handbook

Tml0450-100

R=101±0.2

P=15⁺¹₀

M5 (3x) (depth 10)
for handling



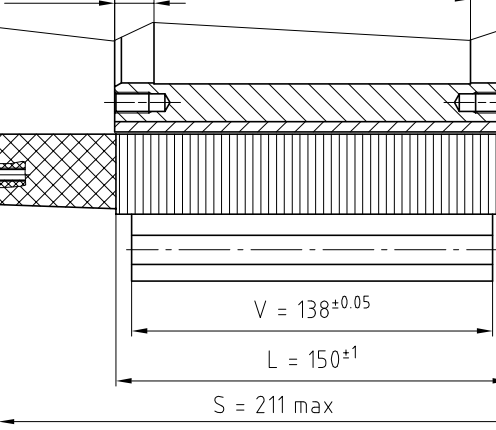
M5 (3x) (depth 10)
for handling

Tml0450-150

R=151±0.2

P=15⁺¹₀

M5 (3x) (depth 10)
for handling



M5 (3x) (depth 10)
for handling

ECO N° C29035	Nom GRO	Date 15.03.2013	Description : Update drawing
Principe de tolérancement de base ISO 8015 et tolérance générale selon ISO 2768-mK			
Dimension nominale	Linéaire	Rayon Chanfrein	Dimension nominale
	0,5 ... 3 > 3 ... 6 > 6 ... 30 > 30 ... 120 > 120 ... 400 > 400 ... 1000 > 1000 ... 2000	±0,1 ±0,1 ±0,2 ±0,3 ±0,5 ±0,8 ±1,2	
Annexe	Lks	α	Dimension nominale
	... 10 > 10 ... 50 > 50 ... 120 > 120 ... 400	±1° ±30' ±20' ±10'	
Arêtes de formes ISO 13715			Equivalence rugosité
Torque motor Tml0450-100 / 150			Ra μm
Interface drawing			Classe
Auteur			50
Vérificateur			25
Libérateur			12,5
S. Perrot			6,3
25.04.06			3,2
			1,6
			0,8
			0,4
			0,2
			0,1
			0,05
			0,025
			N12
			N11
			N10
			N9
			N8
			N7
			N6
			N5
			N4
			N3
			N2
			N1

φ450	k10	+0.25	450.25
φ345	H8	+0.089	345.089
Cote	Ajustement		

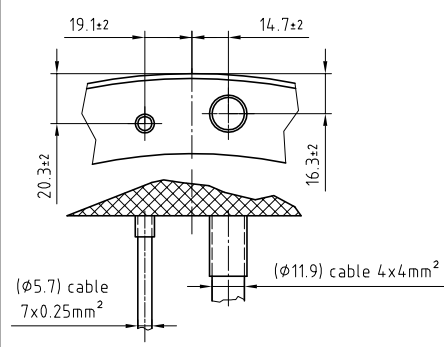
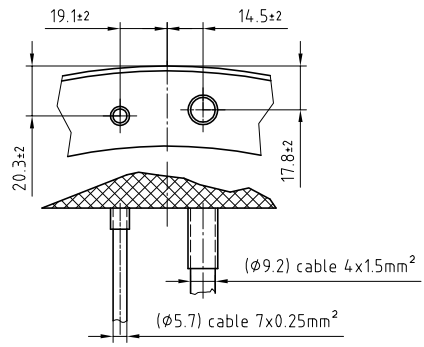
ETEL S.A.
CH-2112 Möhlers
SWITZERLAND

Projection	Format	Echelle	Annecien n° : 0526m-i4.0-03b	Version	Revision	Feuille	Page
1:2	A2	1:2	589169 - 02- A-01			1/1	

TMM0450-030-3VBS-S##
TML0450-030-3VBS-S##

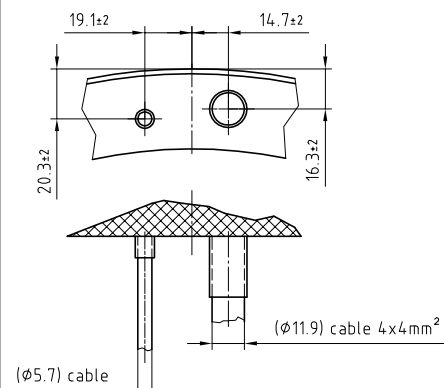
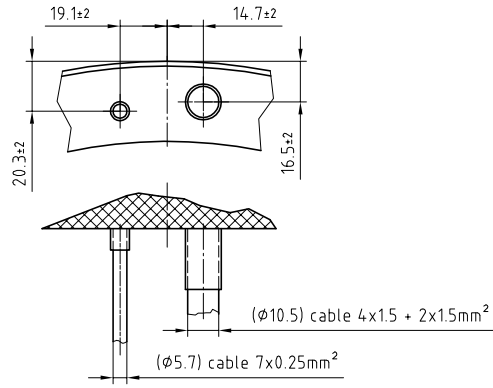
TMM0450-030-3VDS-S##
TML0450-030-3VDS-S##

07
A



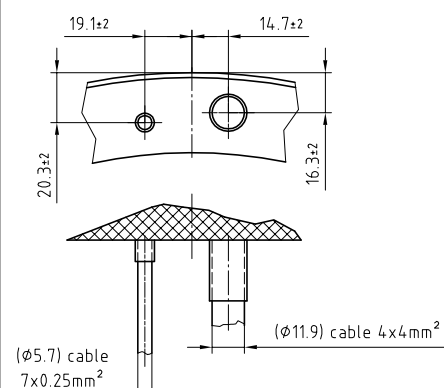
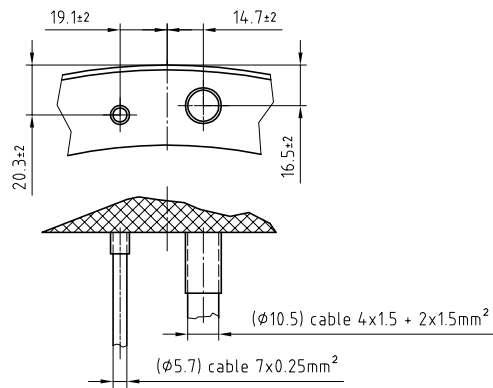
TMM0450-050-3VBN-S##
TML0450-050-3VBN-S##

TMM0450-050-3VDS-S##
TML0450-050-3VDS-S##



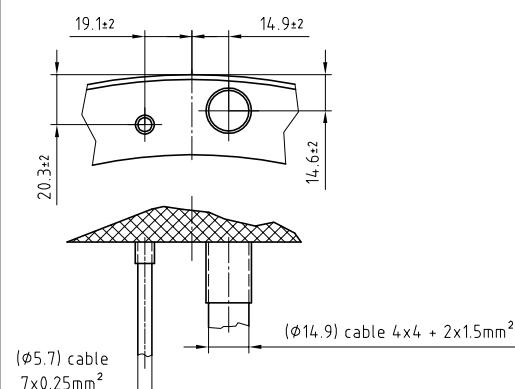
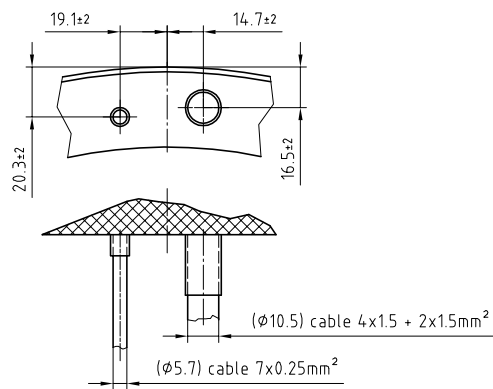
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TML0450-070-3VBN-S##

TMM0450-070-3VDS-S##
TML0450-070-3VDS-S##



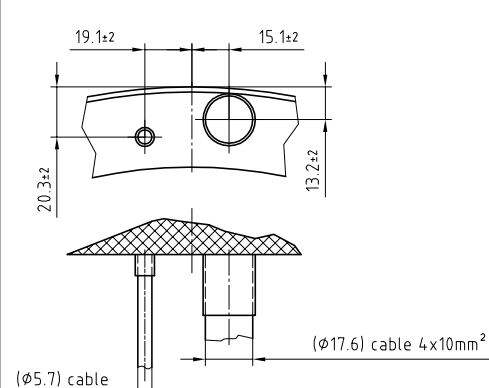
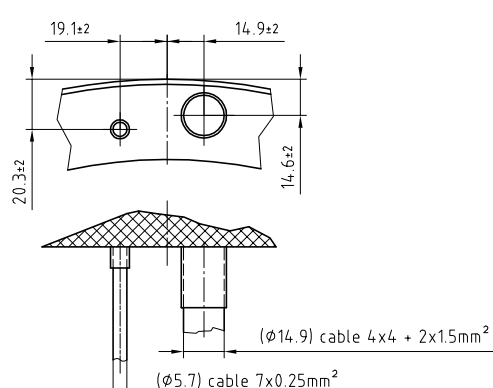
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TML0450-100-3VBN-S##

TMM0450-100-3VDN-S##
TML0450-100-3VDN-S##

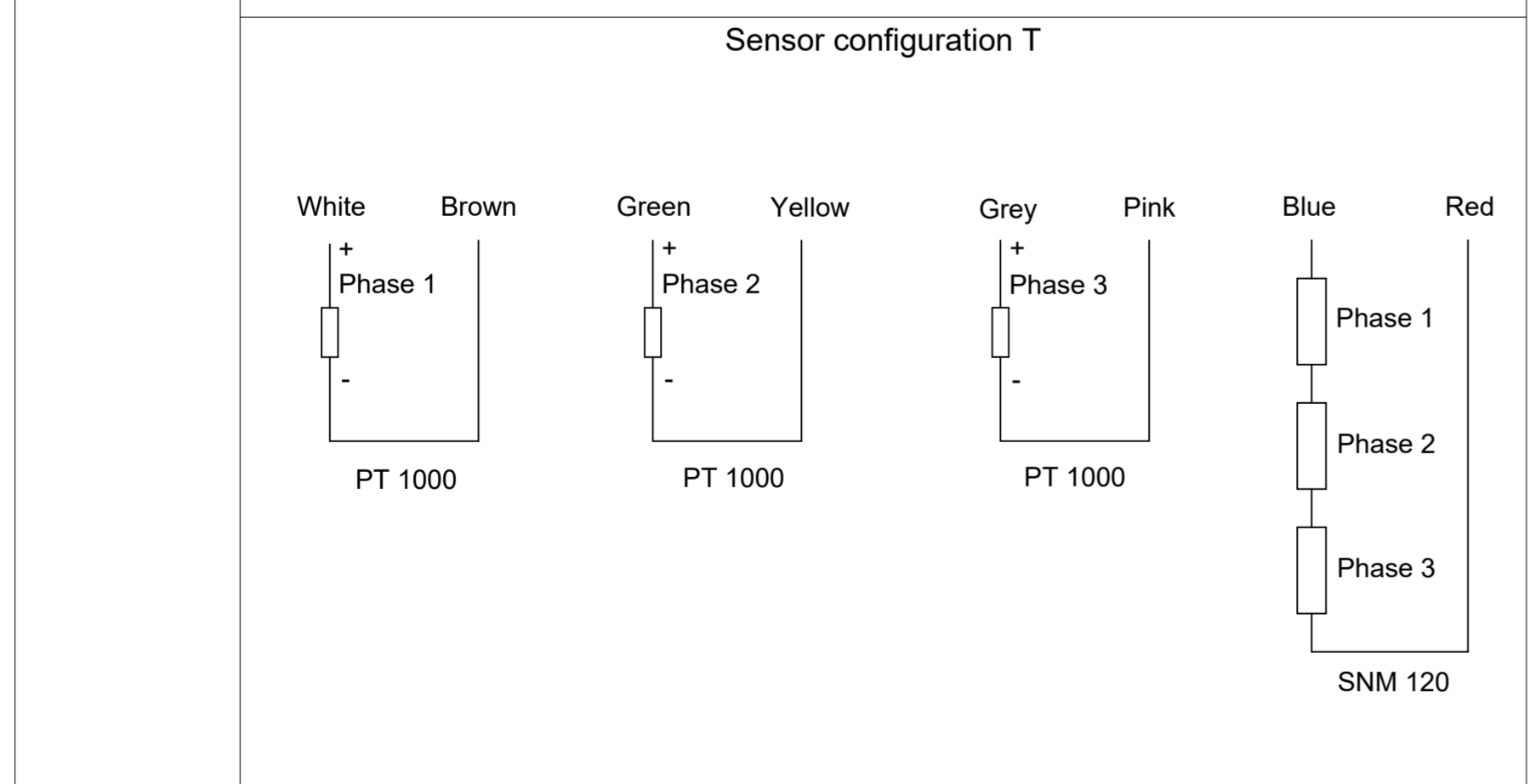
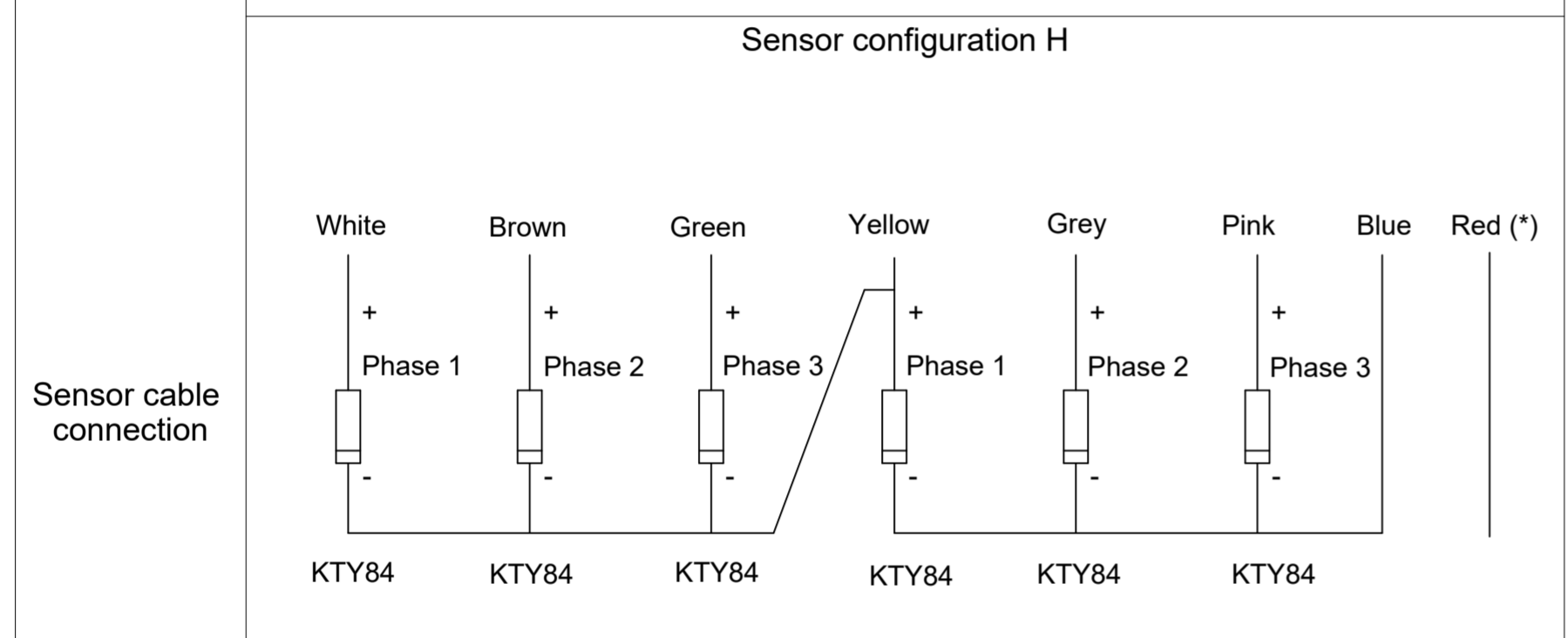
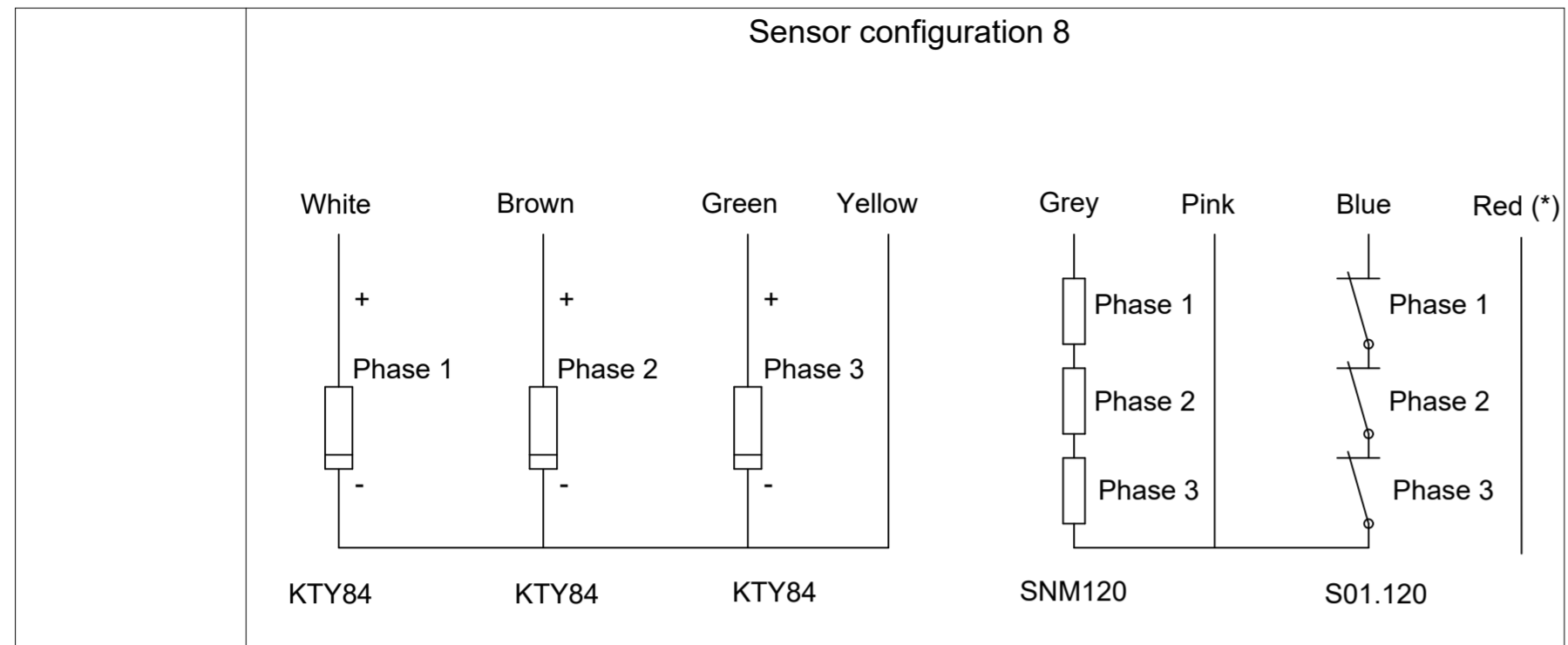


TMM0450-150-3VDN-S##
TML0450-150-3VDN-S##

TMM0450-150-3VHS-S##
TML0450-150-3VHS-S##



07	FSM N°	Nom	Date	Description: Elbowed output cable removed		
	C064986-5	JGU	05.10.17			
Matière: -					Equivalence rugosité	
Remarque: -						
Annexe: -						
Arêtes de formes ISO 13715		Torque motor TMM & TML0450 cables outputs		Auteur	Vérificateur	Libérateur
-0.3		+0.3		S. Iervolino	-	-
Moteur couple fer TMM & TML0450 sorties de câbles				22.09.2005	-	-
ETEL S.A. CH-2102 Môtiers SWITZERLAND		Ces plans sont notre propriété. Ils ne doivent pas, sans notre autorisation écrite, être copiés, reproduits, communiqués à des tiers. Leur utilisation est strictement réservée à ETEL S.A.		Projection	Format	Echelle
ETEL				1st	A1	
				Ancien n°: 0526m-14.0-01	Version	Revision
				576236	-07-	A-01
				Feuille		1/1
				Page		



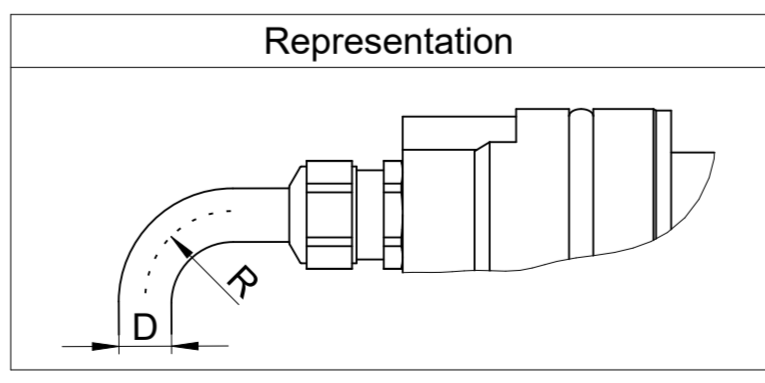
Power cable connection

Color and wire number	Function	Drawing
Black wire with number 1 or U	Phase 1 (PH1)	
Black wire with number 2 or V	Phase 2 (PH2)	
Black wire with number 3 or W	Phase 3 (PH3)	
Yellow and green wire	Ground (GND)	
Black wire with number Br1 or 5 or white cable	Neutral point wire (present only on some motor types)	
Black wire with number Br2 or 6 or black wire without label	None(**)	

(**): This wire is automatically present when the neutral point wire (which is an option) is added in the motor as it is a 2 x 1.5 mm² cable.

Wire section (mm²)

Characteristics	4 x 1.5	4 x 1.5 + 2 x 1.5	4 x 2.5	4 x 2.5 + 2 x 1.5	4 x 4	4 x 4 + 2 x 1.5	4 x 10	4 x 10 + 2 x 1.5	Sensor cable
Applicable motors: TMM / TML	0140 0175 0210 0291 0360 0450	0175 0210 0291 0360 0450 0530	0291 0360	0360 0530	0360 0450 0530	0360 0450 0530	0450 0530	0530	All TMM / TML
Minimum bend radius for fixed cable	R = 4 X D	R = 5 X D	R = 4 X D	R = 5 X D	R = 4 X D	R = 4 X D	R = 4 X D	R = 4 X D	R = 6 X D
Minimum bend radius for moving cable	R = 7.5 X D	R = 7.5 X D	R = 7.5 X D	R = 7.5 X D	R = 7.5 X D	R = 7.5 X D	R = 7.5 X D	R = 7.5 X D	R = 12 X D



(*): Red wire (if present) is not connected on the motor side and cutted flush on cable extremity.

Text:		ID number:
Original drawing		Change No. C145178-05
Scale		Released: 20-Sep-22
Format		Tolerances as per ISO 8015 : 2011
Dimensions in mm		Tolerances selon ISO 8015 : 2011
1:1	A2	Dimensions without tolerance ± 0,2
Mating Dimensions / Cotes d'encombrement		Dimensions sans tolérances
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ETEL ETEL S.A. 2112 Môtiers SWITZERLAND		Version Revision Sheet Page
1389869-00 - A-01		1 of 1
Document number		