



# HAND MAGNETIZING DEVICES HAND YOKE ELECTROMAGNETS

With the HANSA series HELLING company presents a new generation of hand yoke electromagnets, which excel by many advantages as compared with the previous series: they are more light-weight, handy and powerful!

An important ergonomic feature of this series is the specially narrow handle, which facilitates a fatiguefree working – also with small hands.

The series includes the UM-8, UM-9, UM-10 and UM-15 hand yokes. The UM-8, UM-9 and UM-10 yokes differ in dimensions (pole spacing and length), in weight and in lifting strength. Optionally the devices can be fitted with two-limbs flexible

poles, whose lower limbs can be swung inwards or outwards, increasing/decreasing the pole spacing. Due to the contact surface inclination the poles optimally fit to the geometry of the object under testing. For use under rough working conditions the yokes can be provided with special protective poles.



The UM-15 is provided with threelimbs flexible poles standardly. Hereby the poles distance can be set in the range from 95 up to 250 mm.

All hand yokes of the HANSA series also with flexible poles by maximum – meet pole spacing the requirements of general guidelines and standards (EN ISO 9934-3, ASTM 709 and ASME-Code Sect. V). Here a lifting strength of min. 45 N (4.5 kg) or a tangential field strength of min. 20 A/cm (EN ISO 9934-3) is required as operational capability proof.

The HANSA hand yokes are completely sealed, powered by 230 V or 42 V and fulfills the IP 65

protection class requirements. They can be used (with the exception of UM-8 (60 s/30% ED) with the maximum switchon time of 150 sec. and maximum duty cycle of 50%. The cable can be uncoupled in order to prevent breaking of the connecting bushing.

#### UM-8 / HANSA-230 hand yoke electromagnet



Art.No. Pole spacing, mm Pole cross section, mm Dimensions, mm Tangential field strength, A/cm Lifting force, N Supply voltage, V Operating current, A Duty cycle, % Weight, kg Cable length, m Protection class	131.002.020 170 25 x 25 265x163x49 30 130 AC 230 2 50 2.9 5
Protection class	IP 65
Optional: changeable cable 3 m, Art.No. 131 Optional: changeable cable 10 m, Art.No. 13	

#### UM-8 / HANSA-42 hand yoke electromagnet



Pole of Dime Tange Lifting Suppl Opera Duty Weigł Cable	spacing, mm cross section, mm nsions, mm ential field strength, A/cm g force, N ly voltage, V ating current, A cycle, % ht, kg e length, m	131.002.030 170 25 x 25 265x163x49 30 130 AC 42 9 50 2.9 5 5 2.9 5
Cable Prote <i>Nece</i> s	e length, m ction class <i>ssary auxiliaries:</i>	IP 65
Stop	down transformar 220/42 V/ Art N	a 121 000 0E0

Step-down transformer 230/42 V, Art.No.131.009.050 Optional: changeable cable 10 m, Art.No. 131.009.060





# MAGNETIC PARTICLE TESTING

#### UM-9 / HANSA-230 hand yoke electromagnet

Art.No.	131.002.024	
Pole spacing, mm	170	
Pole cross section, mm	25 x 25	
Dimensions, mm	250x135x49	
Tangential field strength, A/cm	30	
Lifting force, N	>130	
Supply voltage, V	AC 230	
Operating current, A	2	
Duty cycle, %	50	
Weight, kg	2.9	
Cable (detachable), m	5	
Protection class	IP 65	
Optional: changeable cable 3 m, Art.No. 131.002.040		
Optional: changeable cable 10 m, Art.No. 131.002.045		

UM-9 / HANSA-42 hand yoke electromagnet

Art.No.	131.002.025
Pole spacing, mm	170
Pole cross section, mm	25 x 25
Dimensions, mm	250x135x49
Tangential field strength, A/cm	32
Lifting force, N	>130
Supply voltage, V	AC 42
Operating current, A	8.5
Duty cycle, %	50
Weight, kg	2.9
Cable (detachable), m	5
Protection class	IP 65
Necessary auxiliaries:	
Step-down transformer 230/42 V, Art.No.131	1.009.050
Optional: changeable cable 10 m, Art.No. 13	1.009.060

# UM-10 / HANSA-230 hand yoke electromagnet

Art.No.	131.002.026
Pole spacing, mm	135
Pole cross section, mm	25 x 25
Dimensions, mm	210x110x49
Tangential field strength, A/cm	30
Lifting force, N	>90
Supply voltage, V	AC 230
Operating current, A	0.8
Duty cycle, %	50
Weight, kg	2.2
Cable (detachable), m	5
Protection class	IP 65
Optional: changeable cable 3 m, Art.No. 131.002	.040
Optional: changeable cable 10 m, Art.No. 131.00	2.045

# UM-10 / HANSA-42 hand yoke electromagnet

Art.No. Pole spacing, mm Pole cross section, mm Dimensions, mm Tangential field strength, A/cm Lifting force, N Supply voltage, V Operating current, A Duty cycle, % Weight, kg Cable (detachable), m Protection class <i>Necessary auxiliaries:</i>	131.002.027 135 25 x 25 210x110x49 30 >90 AC 42 4.4 50 2.2 5 IP 65
Step-down transformer 230/42 V, Art.No.131.	009.056
Optional: changeable cable 10 m, Art.No. 131.	













#### UM-15 / HANSA-230 hand yoke electromagnet



Art.No.	131.002.028
Pole spacing, mm	95-245
Pole cross section, mm	25 x 25
Dimensions, mm	255x173x45
Tangential field strength, A/cm	23
Lifting force, N	>45
Supply voltage, V	AC 230
Operating current, A	3
Duty cycle, %	50
Weight, kg	3.2
Cable (detachable), m	5
Protection class	IP 65
Optional: changeable cable 3 m, Art.No. 131.00	2.040
Optional: changeable cable 10 m, Art.No. 131.0	02.045

### UM-15 / HANSA-42 hand yoke electromagnet



#### Flexible & protective poles for hand yokes



Art.No. Pole spacing, mm Pole cross section, mm Dimensions, mm Tangential field strength, A/cm Lifting force, N Supply voltage, V Operating current, A Duty cycle, % Weight, kg Cable (detachable), m Protection class	131.002.029 95-245 25 x 25 255x173x45 20 >45 AC 42 9 50 3.2 5 IP 65
Protection class	IP 65
Necessary auxiliaries:	
Step-down transformer 230/42 V, Art.No. 131.0	
Optional: changeable cable 10 m, Art.No. 131.0	09.060

Art.No. 131.002.023 – Flexible poles  $45^{\circ}$  - 1 set (2 pcs.) Flexible poles  $45^{\circ}$  for UM-8, UM-9 and UM-10 / HANSA-230. The lower pole limbs can be swung inwards or outwards by  $45^{\circ}$ , increasing / decreasing the poles spacing by approximately 60 cm.

Art.No. 131.002.019 – Flexible poles 76° - 1 set (2 pcs.) Flexible poles 76° for UM-8, UM-9 and UM-10 / HANSA-230, optimized for fillet weld testing.

Art.No. 131.002.602 – Flexible poles special design - 1 set (2 pcs.) Flexible poles with straight limbs and double joints for UM-9 and UM-10 / HANSA 230.

Art.No. 132.020.021 – Protective poles with pin - 1 set (2 pcs.) Protective poles with pin for UM-8, UM-9 and UM-10 / HANSA-230. Serve for poles surface protection while working under rough conditions.

Art.No.131.002.021 – Protective poles with screws - 1 set (2 pcs.) Protective poles for fixing with screws to UM-9 and UM-10 / HANSA 230. Serve for poles surface protection while working under rough conditions.