NON-SPARKING TOOLS (3) 1

NON-SPARKING TOOLS

1ZONES 1, 2 (gas) & 21, 22 (dust)

3/4" Non-sparking Socket Wrench Set (12 points), made of Copper-Beryllium (Cu-Be) or Aluminium-Bronze (Al-Bron) alloys, suitable for use in hazardous areas.

The Non-sparking tools that compose this set are certified by the BAM Certification Body, stating that the materials from which they are made are suitable for use in potentially explosive atmospheres, in zones 1 and/or 21 of all explosion groups (I, IIA, IIB and IIC).



-- Non-sparking tools cannot reach the hardness of conventional tools. For this reason the use of non-sparking tools has to be carried out with special care, avoiding overstraining, heating, etc.

- To avoid damage being caused to both tool and fastener, it is necessary to always ensure that the correctly sized spanner/wrench/screwdriver is selected. Due to the reduced strength and wear resistance of non-sparking Alloys selecting the correctly sized tool becomes essential to avoid premature wear and early deterioration of the tool.

- The use of non-sparking tools must not be the only preventive measure in areas which the items are designed for. Other items, clothes or present material must also be adequate for non-sparking purposes.

COPPER BERYLLIUM ALLOY

Non ferrous substance in the composition makes it safer when non-magnetic applications are required.

COPPER-BERYLLIUM ALLOY						
Designation:	nation: Item No.: Designation:		Item No.:	Weight:	Item No.:	
Socket wrench 3/4" - 21mm	11A75740	Socket wrench 3/4" - 30mm	11A74541			
Socket wrench 3/4" - 22mm	11A75742	Socket wrench 3/4" - 31mm	11A75748			
Socket wrench 3/4" - 23mm	11A76042	Socket wrench 3/4" - 32mm	11A74542			
Socket wrench 3/4" - 24mm	11A74538	Socket wrench 3/4" - 34mm	11A75750			
Socket wrench 3/4" - 26mm	11A74539	Socket wrench 3/4" - 38mm	11A75752			
Socket wrench 3/4" - 27mm	11A74540	Socket wrench 3/4" - 41mm	11A74544	8,5 kg	11A74277	
Socket wrench 3/4" - 28mm	11A75744	Socket wrench 3/4" - 46mm	11A74545			
Socket wrench 3/4" - 29mm	11A75746	Socket wrench 3/4" - 50mm	11A74546			
	Extension 200m	m	11A70387	1		
Slid	Sliding T handle 400mm					
Ratchet 320mm			11A70376			
Socket wrench 3/4" - 3/4"	11A75754	Socket wrench 3/4" - 1.3/16"	11A75768			
LSocket wrench 3/4" - 13/16"	11A75756	Socket wrench 3/4" - 1.7/32"	11A35858			
Socket wrench 3/4" - 7/8"	11A75758	Socket wrench 3/4" - 1.1/4"	11A75770			
Socket wrench 3/4" - 15/16"	11A75760	Socket wrench 3/4" - 1.3/8"	11A74557			
Socket wrench 3/4" - 1"	11A75762	Socket wrench 3/4" - 1.1/2"	11A74559			
Socket wrench 3/4" - 1.1/16"	11A75764	Socket wrench 3/4" - 1.5/8"	11A74561	8,5 kg	11A35817	
Socket wrench 3/4" - 1.1/8"	11A75766	Socket wrench 3/4" - 1.13/16"	11A74564			
Socket wrench 3/4" - 1.5/32"	11A35856	Socket wrench 3/4" - 2"	11A74566			
Extension 200mm			11A70387			
Sliding T handle 400mm						
	Ratchet 320mm					

NON-SPARKING 3/4" SOCKET WRENCH SET - 20 PCS

Full catalogue available on our website: www.inpratex.com

ALUMINIUM BRONZE ALLOY

Minimum ferrous component makes them not 100% non-magnetic, although its low magnetism make it appropiate for non critical non-magnetic applications.

ALUMINIUM-BRONZE ALLOY						
Designation:	Item No.:	Item No.: Designation:		Weight:	Item No.:	
Socket wrench 3/4" - 21mm	11A75741	Socket wrench 3/4" - 30mm	11A74550			
Socket wrench 3/4" - 22mm	11A75743	Socket wrench 3/4" - 31mm	11A75749			
Socket wrench 3/4" - 23mm	11A76043	Socket wrench 3/4" - 32mm	11A74551			
Socket wrench 3/4" - 24mm	11A74547	Socket wrench 3/4" - 34mm	11A75751			
Socket wrench 3/4" - 26mm	11A74548	Socket wrench 3/4" - 38mm	11A75753			
Socket wrench 3/4" - 27mm	11A74549	Socket wrench 3/4" - 41mm	11A74553	8,5 kg	11A74278	
Socket wrench 3/4" - 28mm	11A75745	Socket wrench 3/4" - 46mm	11A74554			
Socket wrench 3/4" - 29mm	Socket wrench 3/4" - 29mm 11A75747 Socket wrench 3/4" - 50mm		11A74555			
E	Extension 200mm					
Slidi	Sliding T handle 400mm					
	Ratchet 320mm					
Socket wrench 3/4" - 3/4"	11A75755	Socket wrench 3/4" - 1.3/16"	11A75769			
LSocket wrench 3/4" - 13/16"	11A75757	Socket wrench 3/4" - 1.7/32"	11A35859			
Socket wrench 3/4" - 7/8"	11A75759	Socket wrench 3/4" - 1.1/4"	11A75771			
Socket wrench 3/4" - 15/16"	11A75761	Socket wrench 3/4" - 1.3/8"	11A74568			
Socket wrench 3/4" - 1"	11A75763	Socket wrench 3/4" - 1.1/2"	11A74570			
Socket wrench 3/4" - 1.1/16"	11A75765	Socket wrench 3/4" - 1.5/8"	11A74572	8,5 kg	11A35826	
Socket wrench 3/4" - 1.1/8"	11A75767	Socket wrench 3/4" - 1.13/16"	11A74575			
Socket wrench 3/4" - 1.5/32"	11A35857	Socket wrench 3/4" - 2"	11A74577			
Extension 200mm			11A71283			
Sliding T handle 400mm						
	Ratchet 320mn	1	11A71273			

MATERIALS				
Copper-Berylium Alloy				
	Be	1.8 % - 2 %		
Composition:	Ni+Co	0.2 % - 1.2 %		
	Otros	<0.5 %		
	Resto	Cu		
Hardness:	283-365 Brinell			
Tensile Strength:	1250 N/mm ²			
Aluminium-Bronze Alloy				
	Al	10 % - 12 %		
Composition:	Ni	4 % - 6 %		
	Fe+Mn	<5.8 %		
	Otros	<0.5 %		
	Resto	Cu		
Hardness:	229-291 Brinell			
Tensile Strength:	800 N/mm ²			

NON-SPARKING 3/4" SOCKET WRENCH SET - 20 PCS

PROPERTIES AND FEATURES			
Property:	Aplication or benefits:		
Non-sparking	Appropriate for explosive potential environments.		
Non-magnetic safety	Essential for equipments that require complete non-magnetic safety.		
Corrosion resistant	Specially well suited for applications in corrosive environments like encountered in marine works or fire- fighting applications.		
Forged after casting	Provide higher mechanical properties and better finishing.		
Ergonomic designs	The use of bi-material anti-slippery handles, dipping anti-slippery handles, totally ergonomic designs make operations easier, more comfortable and master.		
CAUTION	·		

CAUTION:

These tools are not classified as anti-static because they do conduct electricity. Do not use high copper content tools (>65%) in direct contact with acetylene due to the possible formation of explosive acetylide, specially in the presence of moisture.

DIFFERENCES AND HOW TO MAKE THE CORRECT CHOICE				
Concept:	COPPER-BERYLLIUM Cu-Be	ALUMINIUM-BRONZE Al-Bron		
Hardness:	283-365 Brinell.	229-291 Brinell.		
Magnetism:	Non ferrous substance in the composition makes it safer when non-magnetic applica- tions are required.	Minimum ferrous component makes them not 100% non-magnetic, although its low magnetism make it appropiate for non critical non-magnetic applications.		
Durability:	Much higher due to the higher hardness and tensile strength. Higher efforts can be made.	Not as much as Cu-Be		
Price:	Higher price due to the special raw material used.	Significantly lower price.		

MAIN APPLICATION FIELDS						
Petrochemicals	Plastic manufacturing	Breweries	Air Forces			
Refineries	Pharmaceutical Industry	Alcohol processing industries	Navy			
Oil Companies	Fireworks Industry	Distilleries	Weapon & ammunition fabrication			
Gas & oil pipe lines	Chemical Industry	Fire-fighters	Aerospace industry			
Power Stations	Paper making Industries	Mines	Automobile Industry			
Paint Manufacturing	Flour silos and mills	Defence	Etc.			