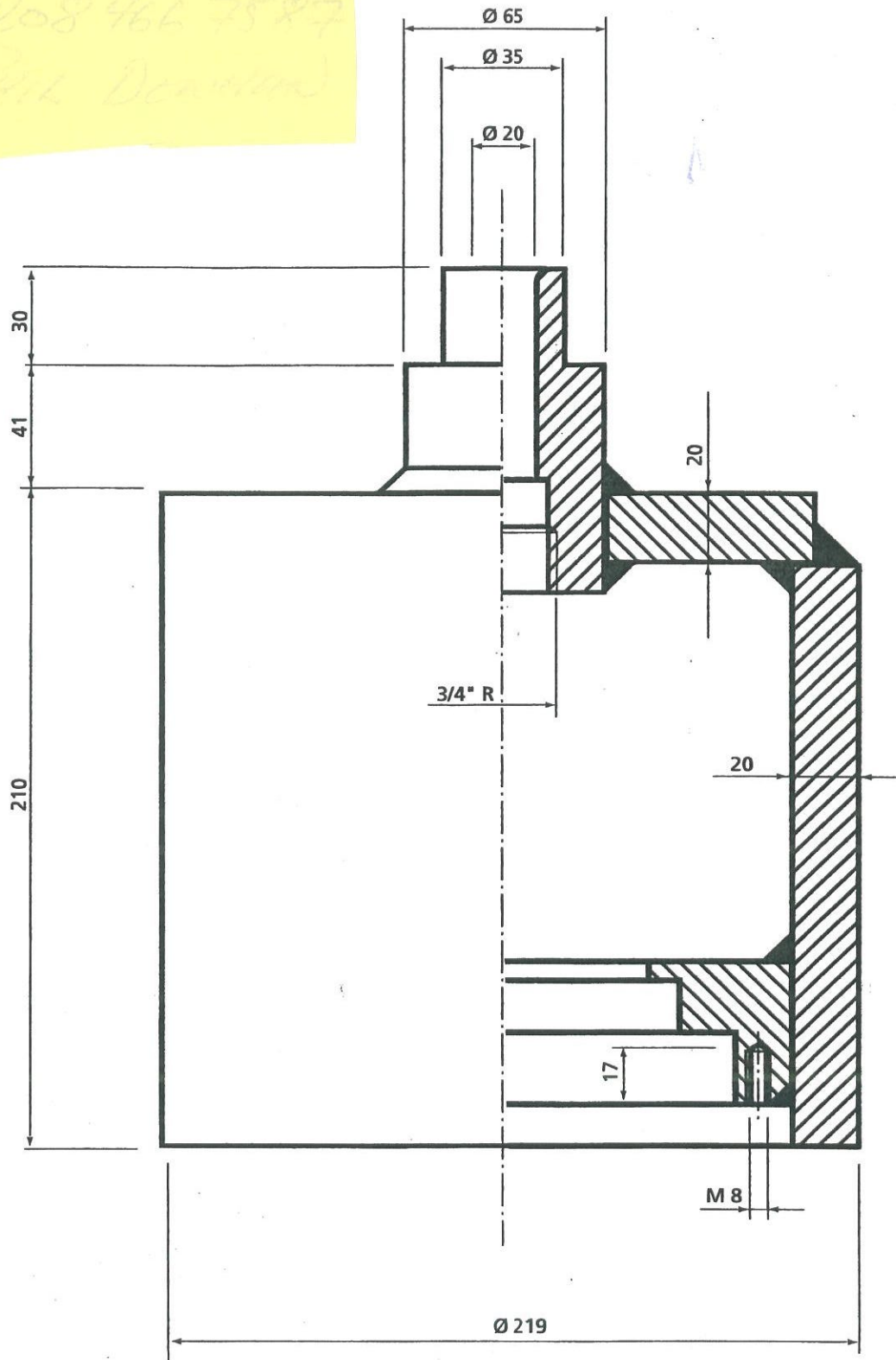


NAVIGATION ECHO SOUNDERS SKIPPER ED 161 / ED 162 / GDS 101.

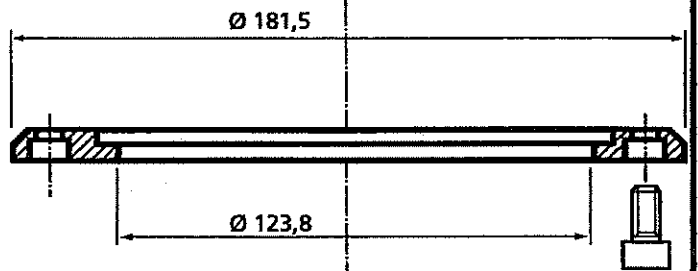
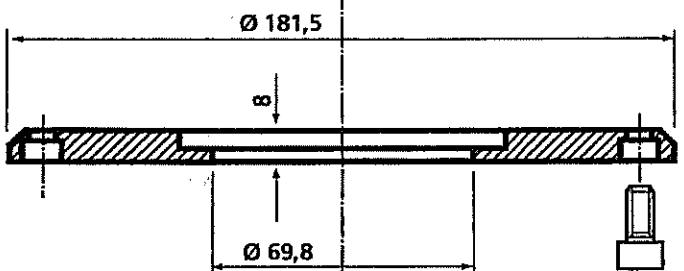
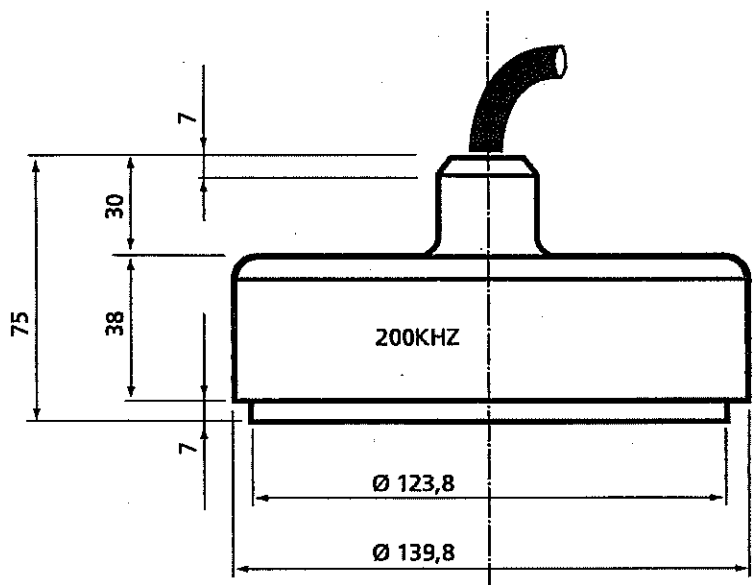
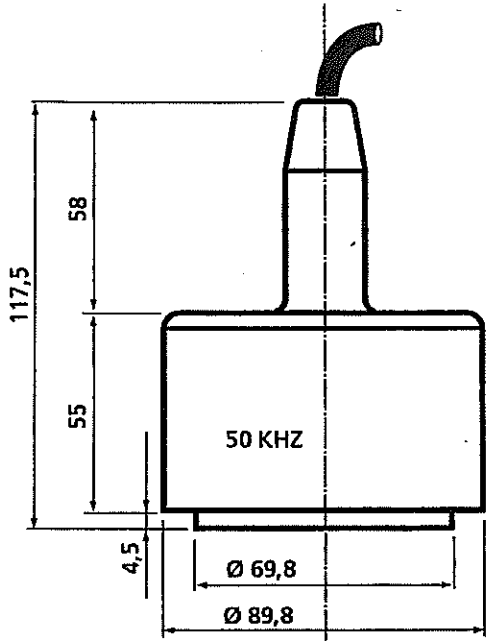
TRANSDUCER CHANGE BY THE HELP OF A DIVER.

- 1: Check that there is no sand filled into pipe for cable between junction box and transducer tank.
If pipe is filled with sand, it will be necessary to drydock ship and use pressurized air to loosen sand.
Also check that lower edge of tank has not been damaged. If the transducer tank has been deformed, it must be changed during drydocking.
- 2: Disconnect transducer cable in junction box and connect thin line to end of cable.
- 3: By use of diver, unscrew the 6 allen screws fixing the transducer mounting ring. Remove the mounting ring and let the transducer element hang by the cable.
- 4: Unscrew the nut around the cable where it enters the cable gland and pull the cable, taking care that the line follows all the way through. Pull enough line to enter deck or service launch. Pls check that the flange nut, steel washer, rubber packing and another steel washer follows the cable out of the cable gland. These will not be used again.
- 5: Check that new nut, steel washer, rubber packing and another steel washer is mounted on the cable of the new transducer.
Nut to be closest to transducer.
- 6: Using the line, pull up new cable through tank and pipe, leaving one half metre of cable between tank and transducer element.
- 7: Place steel washers, rubber packing and nut in cable gland. Tighten nut as far as it will go.
- 8: Place transducer element in tank, taking care not to squeeze the cable. Place new mounting ring in tank, holding the transducer in position.
- 9: Enter and secure all 6 bolts, holding the transducer mounting plate in position. Check that there are no protruding edges around the mounting ring and transducer face.
- 10: Secure and connect cable in junction box. Check that screens are connected together, and insulated from ground in junction box.
- 11: Check echosounder for correct operation.

0049 208 466 7587
 (PHIL DENNIN)

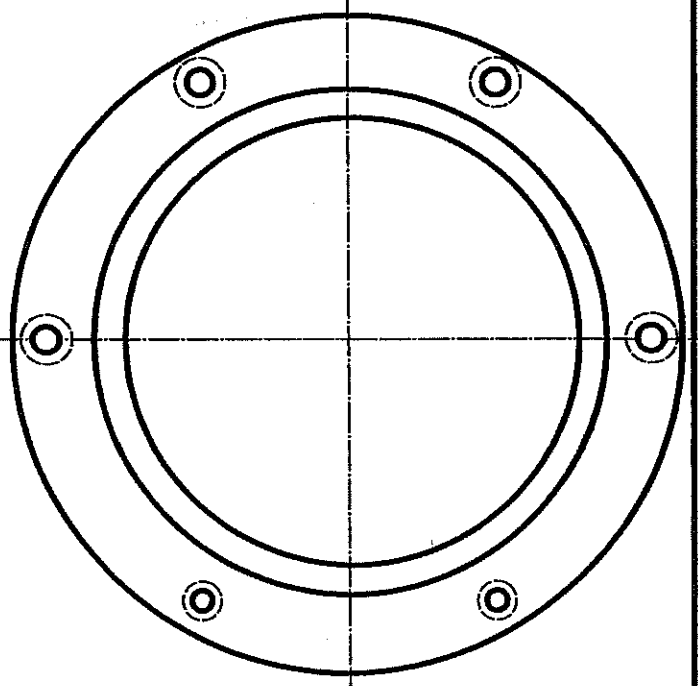
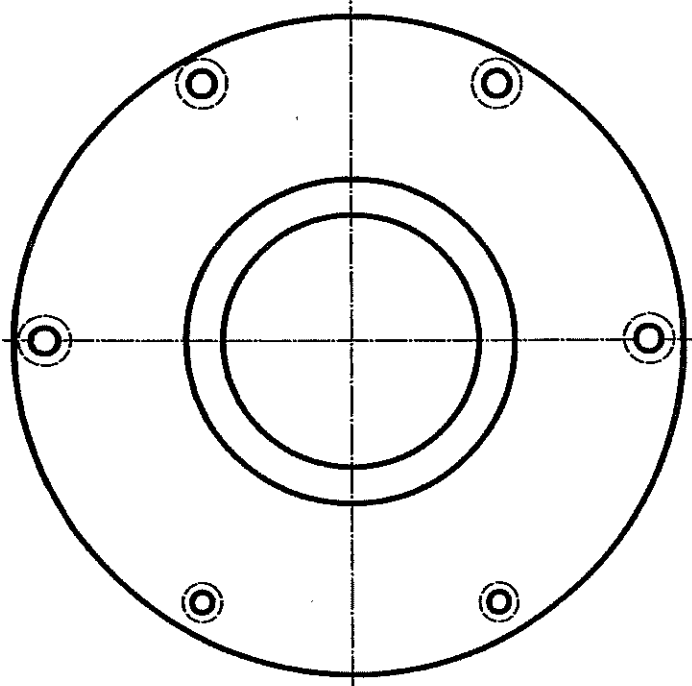


PROJ. MET.		TOLERANSER FOR IKKE SPESIelt TOLERANSESATTE MÅL: MIDDELS NS 1430	SKIPPER
MÅLEST.		TRANSDUCER TANK FOR NAVIGATION ECHO SOUNDERS 50 AND 200 KHZ	
TEGN.			TB 2002
KONTR.			ARKIV NR. A2 - A4
GODKJ.			



M 8X16 ALLEN SCREW X 6

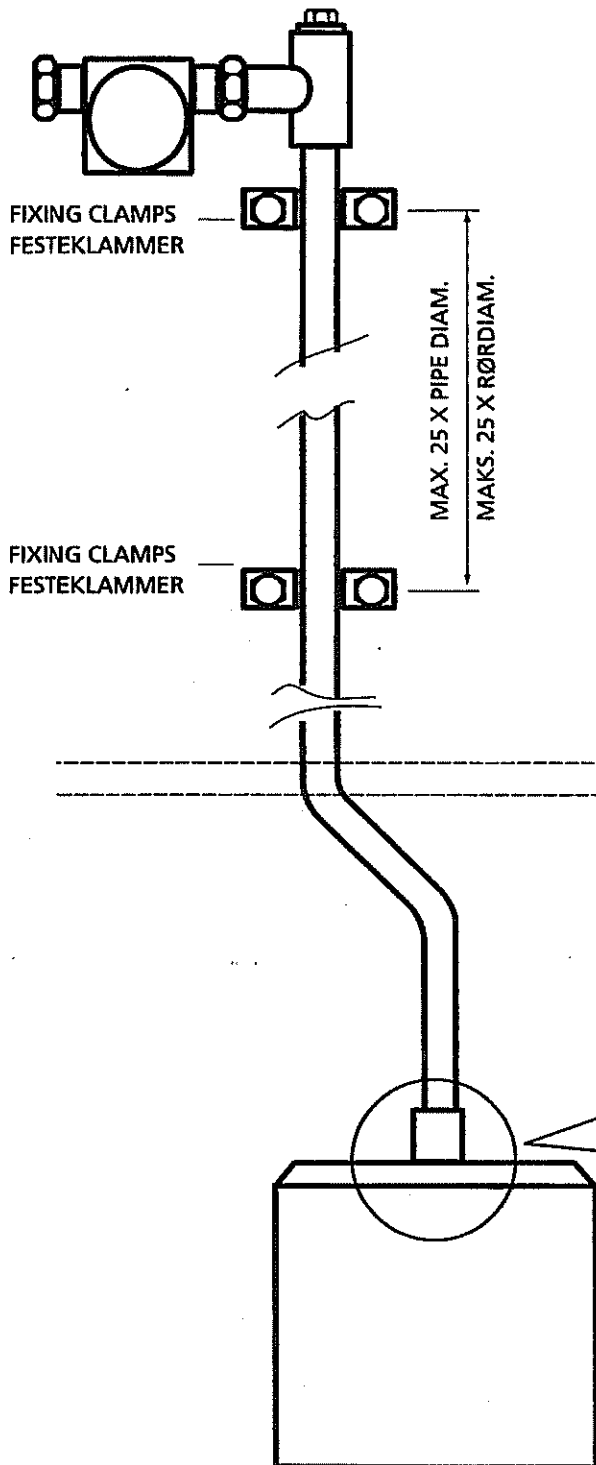
M 8X16 ALLEN SCREW X 6



PROJ. MET.		TOLERANSER FOR IKKE SPEIELT TOLERANSE SATTE MÅL: MIDDELS NS 1430	SKIPPER
MÅLEST.		MOUNTING RINGS AND TRANSDUCER ELEMENTS FOR 50 AND 200 KHZ NAVIGATION SOUNDRES	
TEGN.			TB 2001
KONTR.			ARKIV NR. A2 - A4
GODKJ.			

WATERTIGHT JUNCTION BOX MUST BE SITED FOR EASY ACCESS IN AN EXPLOSION-SAFE PLACE.

VANNTETT KOPLINGSBOKS PLOSSERES PÅ IKKE EKSPLOSJONSFARLIG, LETT TILGJENGELIG STED



STEEL PIPE, MIN. 35MM DIAM. INSIDE.

WALL THICKNESS:

- GALVANIZED PIPE: MINIMUM 6 MM
- BLACK PIPE: MINIMUM 10 MM

QUALITY OF MATERIAL:

- STATED IN VERITAS CAP. X. PARA. 7A, TYPE III
- THE PIPE TO BE WELDED BEFORE PULLING THE CABLE.
- EXPANDING POSSIBILITIES MUST BE ARRANGED.
- MAXIMUM DISTANCE BETWEEN PIPE CLAMPS, 25 X PIPE DIAM.

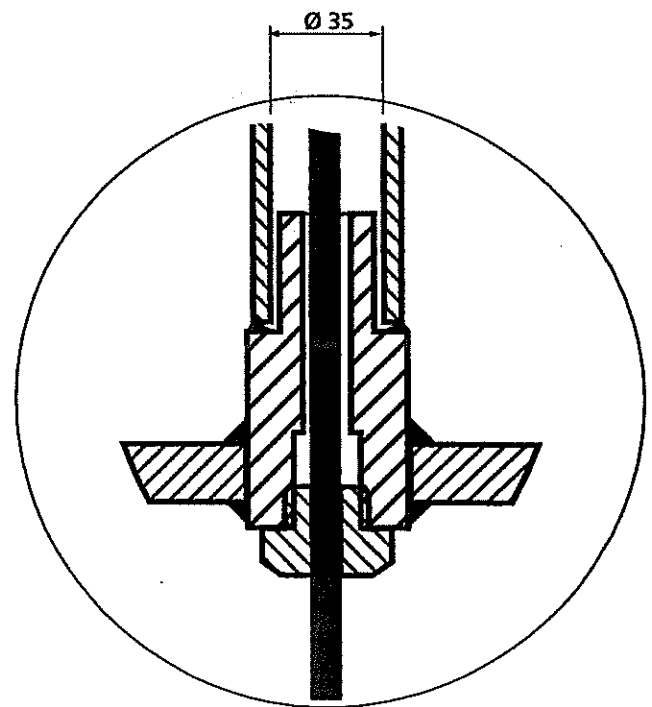
STÅLRØR, INNV. DIAM. MIN. 35 MM

VEGGTYKKELSE:

- GALVANISERTE RØR: MIN. 6 MM
- SVARTE RØR: MIN. 10 MM

MATERIALKVALITET:

- SE VERITAS REGLER KAP. X. PARA 7A, TYPE III
- RØRET SVEISES INN MED TILSTREKkelig EKSPANSJONSMULIGHET, FØR KABELN TREKKES.
- MAKS. KLAMMERAVSTAND PÅ RØRE, 25 X RØRDIAM.



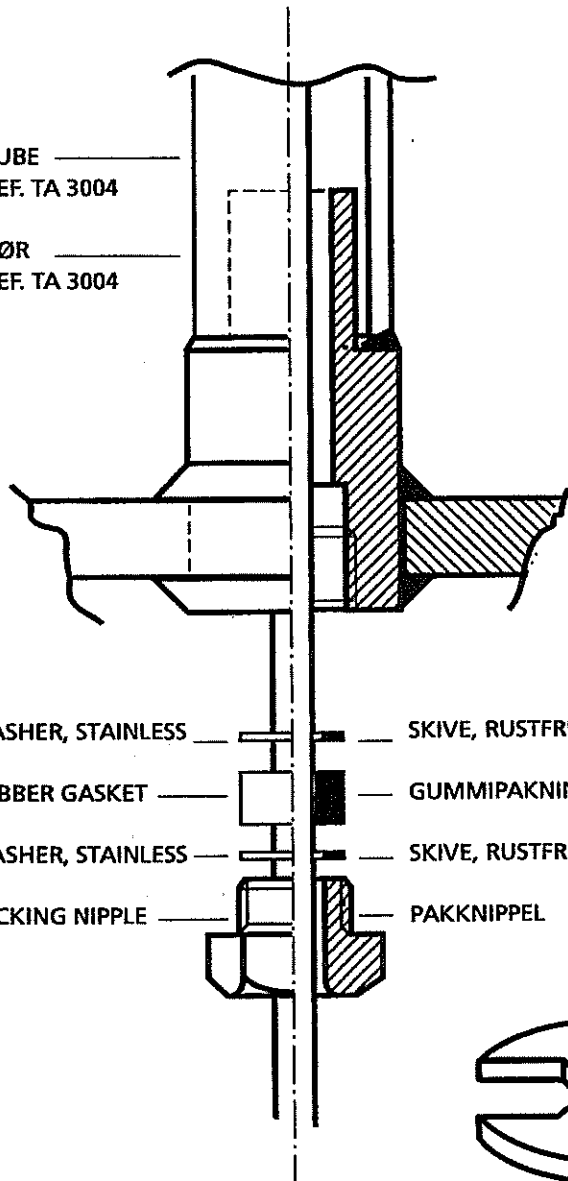
PROJ. MET.		TOLERANSER FOR IKKE SPESIelt TOLERANSESATTE MÅL: MIDDELS NS 1430	SKIPPER
MÅLEST.		GASTIGHT CABLE PIPE FOR TRANSDUCERTANK	
TEGN.		GASSTETT KABELRØR FOR SVINGERTANK	TA 3004
KONTR.			
GODKJ.			

PROVIDE APPROX. 3/4 M OF CABLE BETWEEN CABLE GLAND AND THE TRANSDUCER ELEMENT

SØRG FOR AT KABELLENGDEN MELLOM KABELGJENNOMFØRING OG SVINGERELEMENT ER CA. 3/4 M.

TUBE
REF. TA 3004

RØR
REF. TA 3004



WASHER, STAINLESS

RUBBER GASKET

WASHER, STAINLESS

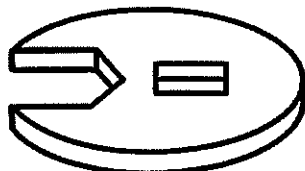
PACKING NIPPLE

SKIVE, RUSTFRI

GUMMIPAKNING

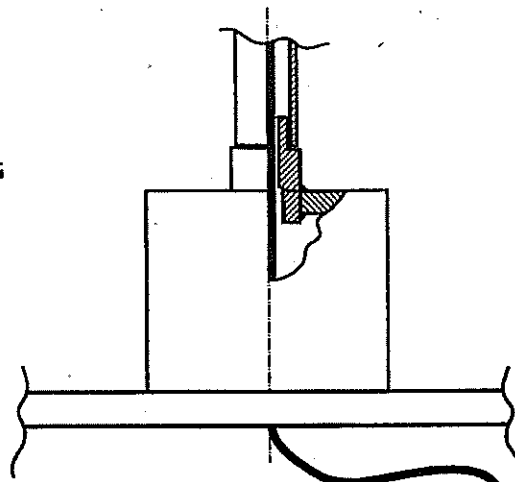
SKIVE, RUSTFRI

PAKKNIPPEL



SPECIAL WRENCH/TOOL FOR TIGHTENING OF PACKING NIPPLE

SPESIALVERKTØY FOR STRAMMING AV PAKKNIPPEL



TRANSDUCER ELEMENT WITH 25 M. CABLE
SVINGERELEMENT M. 25 M. KABEL

MOUNTING RING
MONTASJERING



ALLEN SCREW M8X16
APPLY LEAD OR SIM.
ON THREADS

SYLHODE SKRUE M8X16
PÅFØR BLYHVITT EL.LIGN.
PÅ GJENGER



ALLEN KEY, 6MM
NØKKEI, 6MM

PROJ. MET.

TOLERANSER FOR IKKE SPESIELT
TOLERANSESATTE MÅL: MIDDELS NS 1430

SKIPPER

MÅLEST.		
TEGN.		
KONTR.		
GODKJ.		

MOUNTING OF TRANSDUCER
IN STEEL TANK.
MONTASJE AV SVINGER I
STÅLTANK

TB 3003

ARKIV NR. A2 - A4