Local regulations may restrict the use of this product to below the conditions quoted.
In the interests of development and improvement of the product, we reserve the right to change the specification without notice. © Copyright 2026

UTDS90

Stainless Steel Thermodynamic Steam Trap for use with 4-Bolt Pipeline Connector

Description

The UTDS90 is a workshop maintainable stainless steel thermodynamic steam trap with a replaceable disc and seat. It has been specifically designed to ASME Class 900.
The UTDS90 is attached to a suitable pipeline connector (e.g. PC90) by four connector bolts for quick and easy installation, and replacement.

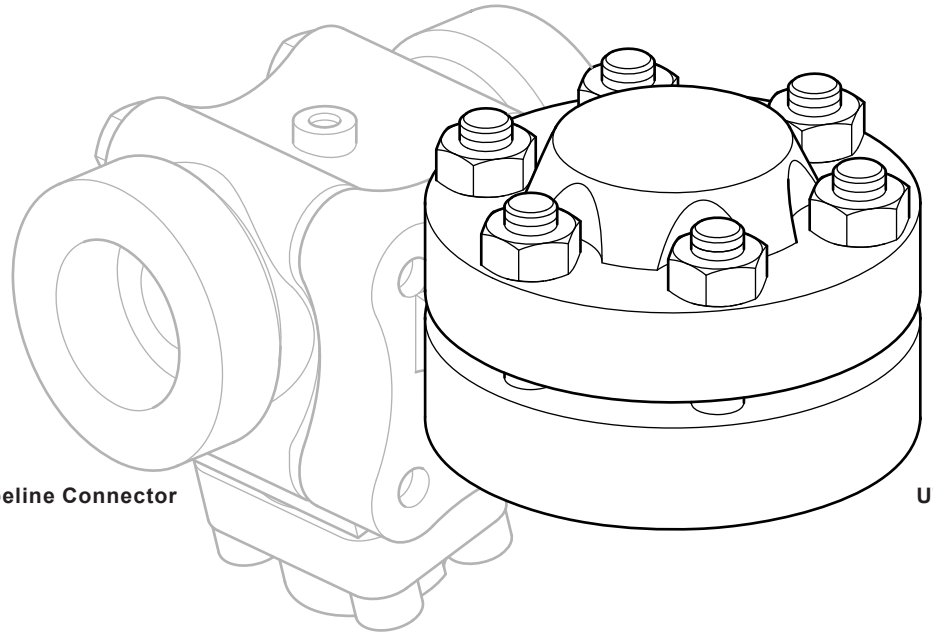
Standard

This product fully complies with the requirements of the European Pressure Equipment Directive 2014/68/EU.

Certification

This product is supplied with EN 10204 3.1 certification as standard.
Note: All certification / inspection requirements must be specified at the time of order placement.
Canadian Registration (CRN) for the UTDS90 is pending.

UTDS90 shown connected to a PC90 four bolt connector.



PC90 Pipeline Connector **UTDS90 Steam Trap**

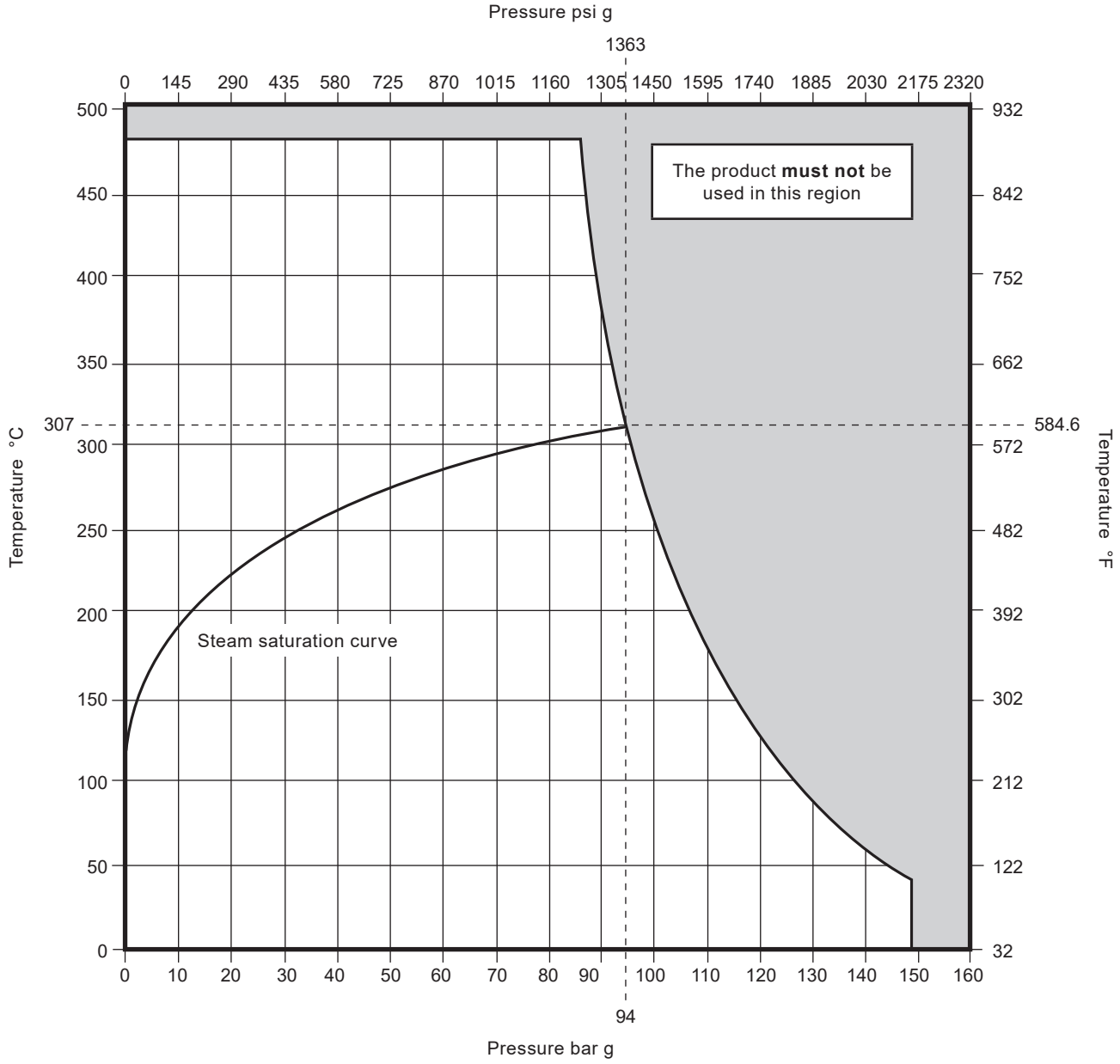
Pipeline connector options

The UTDS90 must be fitted to a 4-Bolt pipeline connector or approved equivalent.

PC90	4-Bolt Pipeline Connector	ASME 900	(TI-P806-01)

See the relevant Technical Information sheet as listed above for details of the pipeline connector.

Pressure/temperature limits (ISO 6552)



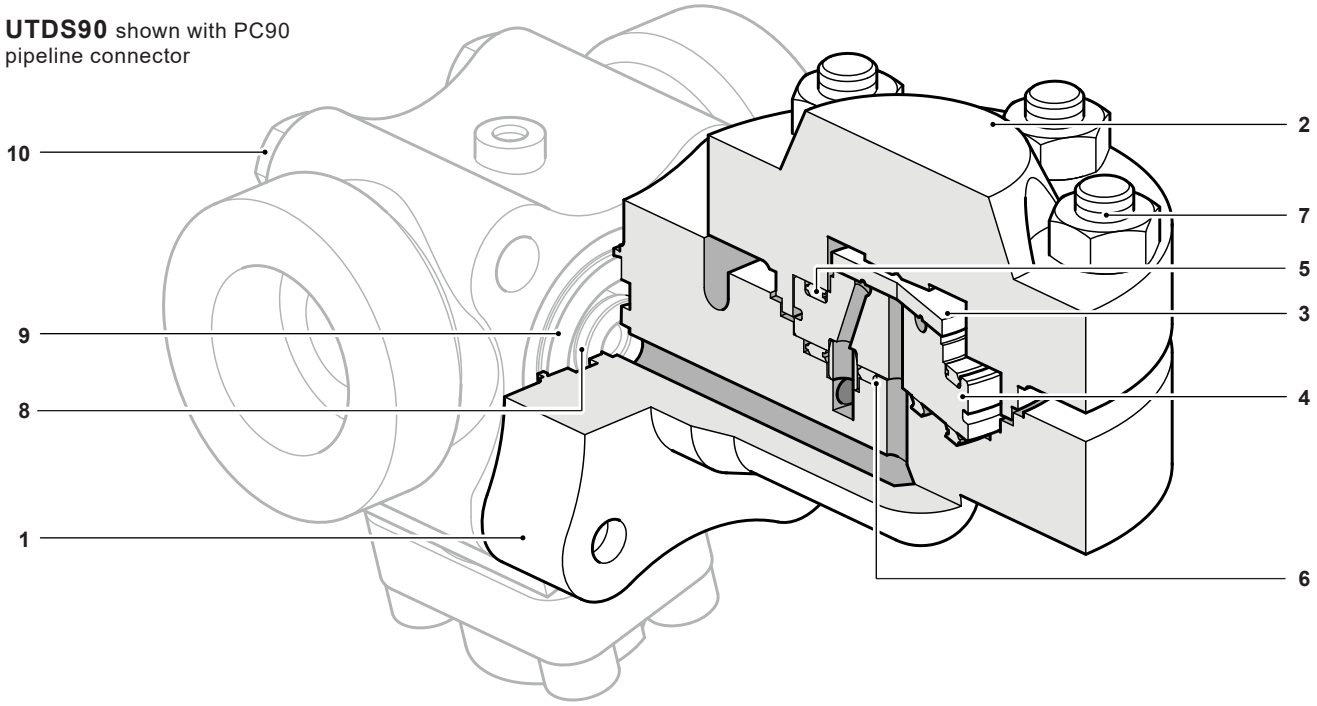
Note: The model of pipeline connector and connection selected will dictate the maximum operating limits of the complete assembly. Reference the specific pipeline connector Technical Information sheet as detailed in 'Pipeline connector options'.

Body design conditions			ASME Class 900
PMA	Maximum allowable pressure	149.1 bar g @ 38 °C	2163 psi g @ 100 °F
TMA	Maximum allowable temperature	482 °C @ 86 bar g	900 °F to 1245 psi g
Minimum allowable temperature		-46 °C	-50.8 °F
PMO	Maximum operating pressure for saturated steam	94 bar g @ 307 °C	1363 psi g @ 584.6 °F
TMO	Maximum operating temperature	482 °C @ 86 bar g	900 °F @ 1245 psi g
Minimum operating differential pressure		8 bar g	116 psi g
Minimum operating temperature *		0 °C	32 °F
PMOB	Maximum operating backpressure is 80% of the upstream pressure		
Designed for a maximum cold hydraulic test pressure of		224 bar g	3249 psi g

The UTDS90 is suitable for full vacuum conditions.
* **Note:** For lower operating temperatures consult Spirax Sarco

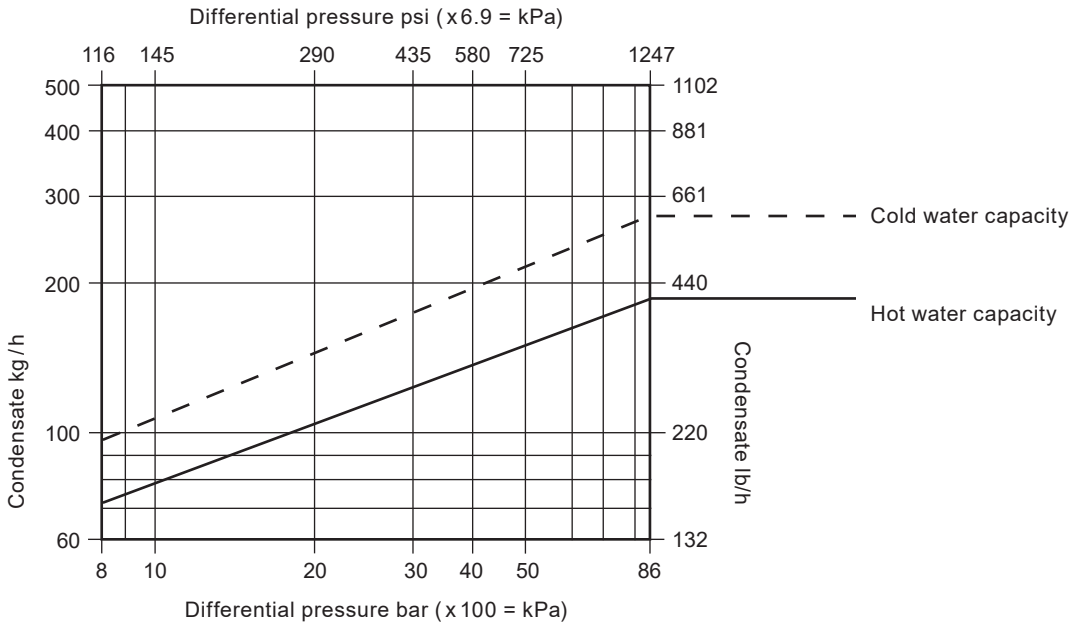
Materials

UTDS90 shown with PC90 pipeline connector



No.	Part	Material	
1	Body	Austenitic Stainless Steel	ASTM A351 CF8M
2	Cover	Austenitic Stainless Steel	ASTM A351 CF8M
3	Disc	Hardened steel	DIN 1.2379
4	Seat	Hardened steel	DIN 1.2379
5	Cover gasket	Graphite/stainless steel	Graphite Foil/UNS S30400 - EN 1.4301
6	Seat gasket	Graphite/stainless steel	Graphite Foil/UNS S30400 - EN 1.4301
7	Cover Studs and Nuts (6)	Stainless steel	Nut = ASTM A194 Stud = ASTM A193 grade 8 SH
8	Inner gasket	Graphite/stainless steel	Graphite Foil/UNS S30400 - EN 1.4301
9	Outer gasket	Graphite/stainless steel	Graphite Foil/UNS S30400 - EN 1.4301
10	Pipeline heavy hex connector bolts (4 off)	Austenitic Stainless Steel	ASTM A193 grade B8 class 2

Capacities



Dimensions/weights (approximate) in mm (inches) and kg (lbs)

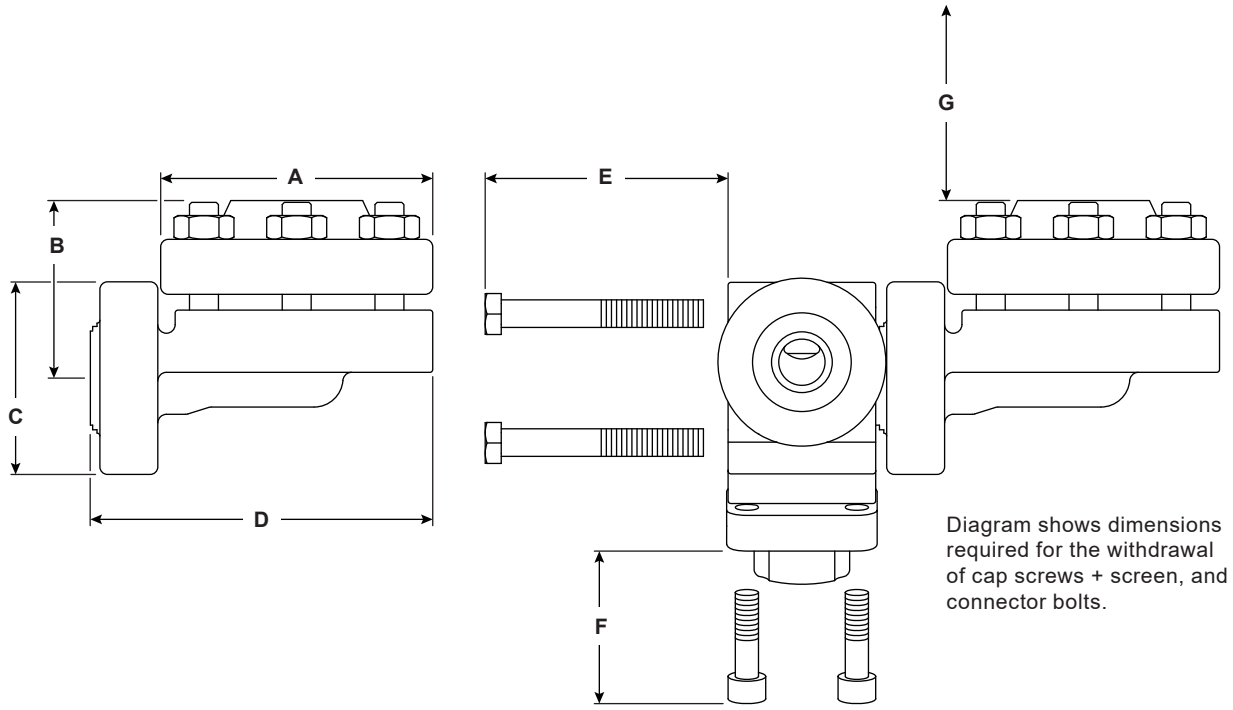


Diagram shows dimensions required for the withdrawal of cap screws + screen, and connector bolts.

Dimensions				Withdrawal dimensions			Weight (Trap Only)
A	B	C	D	E	F	G	
94 (3.7)	64 (2.5)	67 (2.9)	119 (4.7)	80 (3.14)	85 (3.34)	30 (1.18)	3.7 (8.2)

Safety information, installation and maintenance
For full details see the Installation and Maintenance Instructions (IM-P804-02) supplied with the product.

Disposal
Some or all components of this product are recyclable. No environmental hazards are anticipated during the disposal of recyclable parts. For more information, please contact your local Spirax Sarco manufacturing or sales centre.

Installation note:
The UTDS90 is designed for installation with the disc in a horizontal plane.
It is recommended that a non-return valve is fitted when discharging condensate into return lines where backpressure is experienced.
It is also recommended that a diffuser is fitted when discharging to atmosphere.
For ease of maintenance, consideration should be given to fitting isolation valves upstream and downstream of the steam trap.

How to specify
Steam traps shall be Spirax Sarco UTDS90 thermodynamic type, of stainless steel construction, with replaceable disc and seat, designed to ASME Class 900.

Traps to be workshop maintainable and to be connected to separate pipeline connector by four connector bolts for quick and simple installation/replacement.

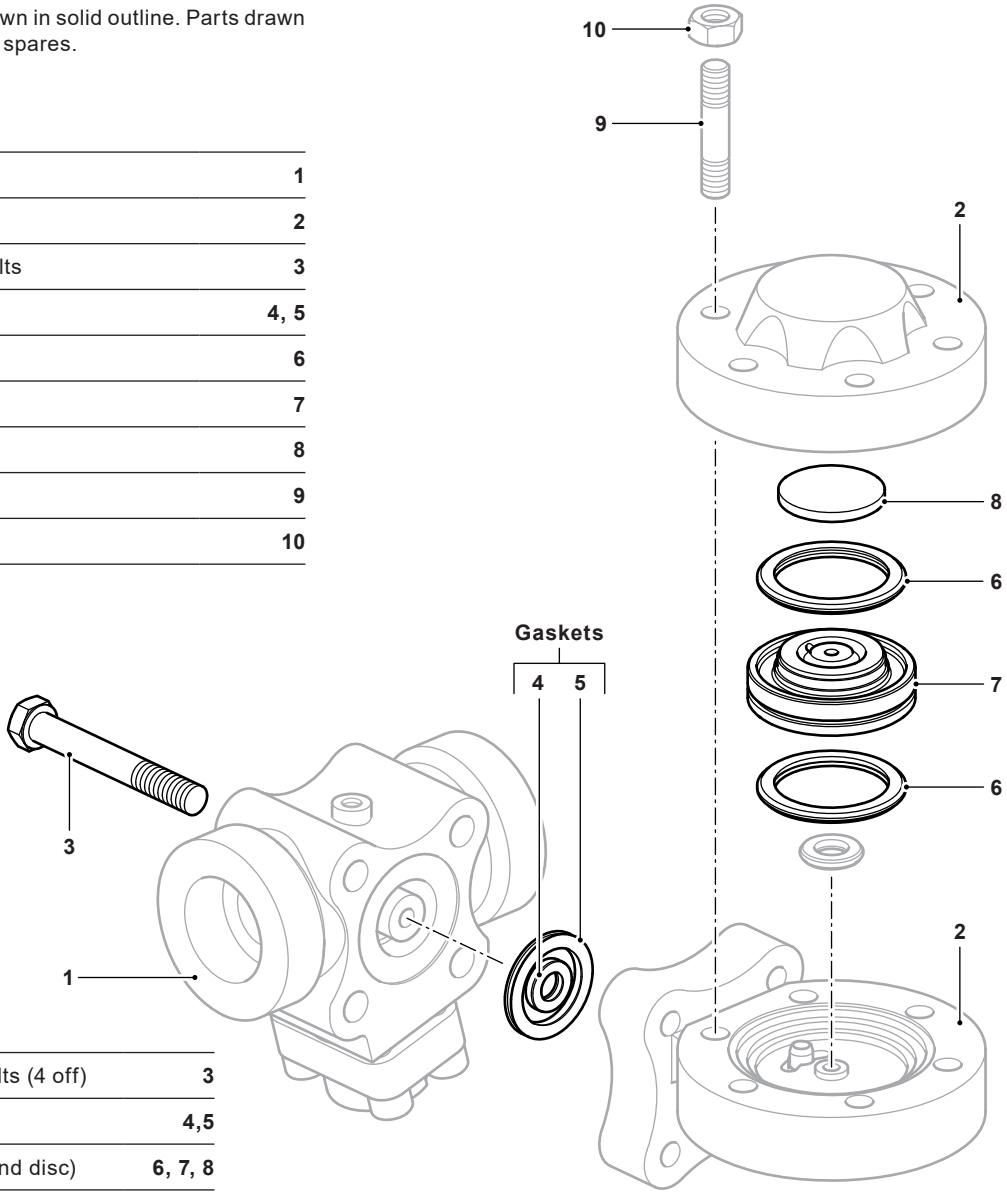
How to order
The UTDS90 needs to be fitted to a new or existing PC90 4-Bolt connector or equivalent.
Note: Any optional extras need to be specified at the time of order placement.

How to order example:
1 off Spirax Sarco ¾" PC90 pipeline connector with socket weld connections.
1 off Spirax Sarco UTDS90 thermodynamic steam trap for use on a pipeline connector.

Spare parts

The spare parts available are shown in solid outline. Parts drawn in a grey line are not supplied as spares.

PC90 4-Bolt Pipeline Connector		1
UTDS90 trap unit		2
Pipeline heavy hex connector bolts		3
Pipeline gaskets		4, 5
UTSD90	Gaskets	6
	Seat	7
	Disc	8
	Cover studs	9
	Cover nuts	10



Available spares

Pipeline heavy hex connector bolts (4 off)	3
Set of gaskets (pipeline)	4,5
Maintenance Kit (gaskets, seat and disc)	6, 7, 8

How to order spares

Always order spares by using the description given in the column headed 'Available spares' and state the size and type of steam trap.

Example: 1 - Maintenance kit for a Spirax Sarco UTDS90 thermodynamic steam trap.

Recommended tightening torques

Item	Part				N m	ft lbs
10	Cover nuts		17 mm	M10	28	20.7
9	Cover Studs		-	M10		
3	Heavy hex connector bolts		A/F 1 1/16	3/8" UNC	26	19.2