

Voith Turbo

VOITH

Tightening torques DIWA.5

Version 08/2007

DIWA.5 tightening torques

Tightening torques for hex. head and cheese-head screws

Dimensions	Property class	Tightening torque [Nm]	Tightening torque [lb-ft]
M4	8.8	3	2
M4	10.9	4	3
M5	8.8	5	4
M5	10.9	8	6
M6	8.8	9	7
M6	10.9	14	10
M8	8.8	23	17
M8	10.9	33	24
M10	8.8	46	34
M10	10.9	67	49
M10x1	8.8	51	38
M10x1	10.9	75	55
M12	8.8	78	57
M12	10.9	115	85
M14x1.5	12.9	232	171
M16	10.9	281	208

Special cases

Name	Dimensions	Tightening torque [Nm]	Tightening torque [lb-ft]
Control block	M8x50	20	15
Input differential	M10x135	55	41
	M10x145		
Stator	M10x35	50	37
Output flange*	M10x50-10.9 SBE	72	53
	M10x50-10.9 SBE-R	66	49
Gear pump - intermediate gear	M10x30-10.9	50	37
Oil filter cover	S110x3	25	18
Temperature sensor	M14x1.5	20-25	15-19
Adapter fitting at oil reservoir	1.5/16-12 UNF	50	37
Screw plug at oil reservoir			

***Fastening the screws at the output flange**

- ➔ Tighten the device with 3 screws to 50 Nm each.
- ➔ Measure the clearance.
- ➔ Set the clearance to 0.1 ± 0.1 .

	NOTE
	Tighten the screws at the output flange one after the other in 3 complete tightening cycles to an appropriate tightening torque (see table).

Tightening torques for screw plugs and hollow screws with CU sealing rings

Dimensions	Sealing ring	Tightening torque [Nm]		Assembly		Name
		Steel/Al		oiled	dry	
		Nm	lb-ft			
M10x1.5	10x13.5	13	10		x	Banjo bolt
M10x1	10x13.5	15	11		x	Screw plug
M12x1.5	12x15.5	20	15		x	Screw plug
M14x1.5	14x18	38	28		x	Screw plug
M18x1.5	18x22	45	33		x	Screw plug
M26x1.5*	26x34	100	74	x		Screw plug
M30x1.5*	30x36	115	85	x		Screw plug
M32x1.5*	32x38	130	96	x		Screw plug
M38x1.5*	38x44	150	111	x		Screw plug
M42x1.5*	42x49	190	141	x		Screw plug
M48x1.5*	48x55	260	192	x		Screw plug


NOTE

Sealing ring and screw of dimensions marked with * have to be oiled slightly.

All other sealing rings and screws have to be dry for mounting.

Voith Turbo GmbH & Co. KG
Alexanderstrasse 2
D-89522 Heidenheim
+49 7321 37 0
+49 7321 37 7618
service-diwa@voith.com
www.voithturbo.com

VOITH
Engineered reliability.