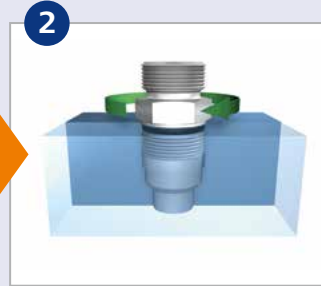




## Make better connections!

### Assembly of METRIC port connections



METRIC Thread  
DIN ISO 6149-2/3  
ISO 9974-2/3  
DIN 3859-T2  
ISO 1179-1

**Attention!** Stainless steel threads must be lubricated

- Use special Volz high-performance lubricant (ABF grease)
- Rubber seals always have to be lubricated

• Screw in until handtight

• Then tighten according to chart

### Tightening torques for carbon steel zink plated fittings into carbon steel ports

Product	Tube O.D.	Thread size T	Straight male stud fittings with port tapping					Non-return valve	Banjo fittings		Adjustable ends		Blanking plugs	
			Form A for sealing washer	Form B with cutting-face	Form E with softseal (WD)	Form F with O-ring sealing	with O-ring sealing and retaining-ring	RSVV / RSVZ Form E with WD softseal	EWHV / ETHV	EWHB	O-ring and retaining ring	O-ring	VSCH-WD Form E with WD softseal	VSCH-ODR Form F with O-ring sealing
Series		inch	Nm	Nm	Nm	Nm	Nm	Nm	Nm	Nm	Nm	Nm	Nm	Nm
L	6	M 10x1,0	9	18	18	15	18	18	18	18	18	15	12	20
	8	M 12x1,5	20	30	25	25	35	25	45	35	35	25	25	35
	10	M 14x1,5	35	45	45	35	45	35	55	50	45	35	35	45
	12	M 16x1,5	45	65	55	40	55	50	80	60	55	40	50	55
	15	M 18x1,5	55	80	70	45	70	70	100	80	70	45	65	70
	18	M 22x1,5	65	140	125	60	160	125	140	120	180	60	90	100
	22	M 26x1,5	90	190	180	100*	250	145	320	130	180	100	135	
	28	M 33x2,0	150	340	310	160	310	210	360		310	160	225	310
	35	M 42x2,0	240	500	450	210	450	360	540		450	210	360	330
42	M 48x2,0	290	630	540	260	540	540	700		600	260	360	420	
S	6	M 12x1,5	20	35		40	35	35	45	35	35	35	25	35
	8	M 14x1,5	35	55		40	45	45	55	50	60	45	35	45
	10	M 16x1,5	45	70		70	55	55	80	60	95	55	50	55
	12	M 18x1,5	55	110		90	70	70	100	80	120	90	65	70
	14	M 20x1,5	55	150		125	80	100	125	110			80	80
	16	M 22x1,5	65	170		135	100	125	135	120	190	100	90	100
	20	M 27x2,0	90	270		180	170	135	320	135	190	170	120	170
	25	M 33x2,0	150	410		310	310	210	360		500	310	225	310
	30	M 42x2,0	240	540		450	330	360	540		600	330	360	330
38	M 48x2,0	290	700		540	420	540	700		600	420	360	420	

- Tolerance of tightening torques listed in above table +10%
- Lubricate thread and rubber seals

Tightening torques relate to counterparts made of steel. When used with e.g. Aluminum or other soft alloys we recommend to use special calibrated fittings to avoid damages.

Available on request at Volz. Tightening torques might need to be adjusted for the material combination used.