

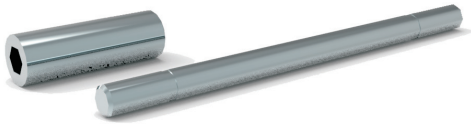
D02, D03 and D05

Size 04 (D02), Size 06 (D03), Size 10 (D05)

Studkit M5



Studkit M6



Technical Features

- › Simplify the installation of ISO 4401, DIN 24340 (CETOP 02, 03 and 05) sandwiches
- › Optionally uncut (can be cut to length in the field) or precut studkits
- › Metric standard threaded rod versions with rolled threads
- › All studs are made of high tensile, class of strength 10.9. (Material ASTM-A-193 Grade B)
- › When installed in a subplate or manifold, they act as a guide during assembly of the sandwich body stack
- › The studnuts are hex socket nuts with an outside diameter equivalent to a standard socket head cap screw
- › In the standard version, the studs and nuts are zinc coated for 240 h protection acc. to ISO 9227

Calculating of studrod length

Calculation formula: $L = LP + \sum HM + LB + LN$

L - total length of the studrod

LP -thread length projection into subplate / block

$\sum HM$ - SUM of all heights of all installed sandwich valves

LB - length of directional valve projection

LN - length of thread in the nut

Size	Size 04 (D02)	Size 06 (D03)	Size 10 (D05)
Studrod thread	M5	M5	M6
length of thread projection into subplate / block (LP)	10 mm (0.39 in)		12 mm (0.47 in)
length of thread in the nut (LN _{min} - LN _{max})	6 mm (0.24 in) - 14 mm (0.55 in)		8 mm (0.31 in) - 14 mm (0.55 in)
length of directional valve projection (LB)	27 mm (1.06 in)	37.3 mm (1.47 in)	30 mm (1.18 in)

Example calculation size 06 (D03):

- directional valve **RPE3-06**, 1 pc 37.3 mm (1.47 in)

- pressure relief valve **VPN1-06**, 1 pc 40 mm (1.57 in)

- pilot operated check valve **2RJV1-06**, 1 pc 40 mm (1.57 in)

Calculation of studrod length (mm) L min. = 10 + 40 + 40 + 37.3 + 6 = 133.3 mm, L max. 10 + 40 + 40 + 37.3 + 14 = 141,3 mm

The correct length of the studs must be between 133.3 mm and 141.3 mm. Available stud length is 136 mm. See table on page 2.

Example calculation size 10 (D05):

- directional valve **RPE4-10**, 30 mm (1.18 in)

- pilot operated check valve **VJR2-10**, 1 pc 50 mm (1.97 in)

Calculation of studrod length (mm) L min. = 12 + 50 + 30 + 8 = 100 mm, L max. = 12 + 50 + 30 + 14 = 106 mm

The correct length of the studs must be between 100 mm and 106 mm. Available stud length is 103 mm. See table on page 2.

Installation note:

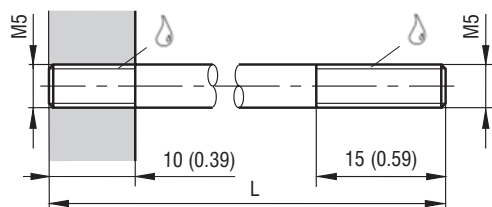
With increases studrod length the maximum operation pressure of complete stack assembly decreases. See table on page 2.

Lubricate threads before assembly! Use the upper limit of torque range.

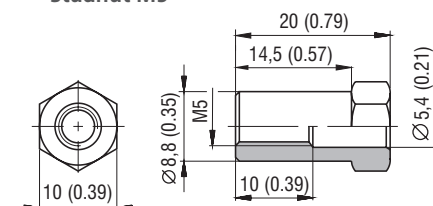
Metric Threads dimensions in millimeters (in)

Studrod M5xL (length L see the table)

Strength class - GR.8 ISO 10.9

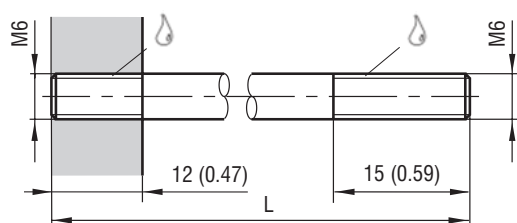


Studnut M5

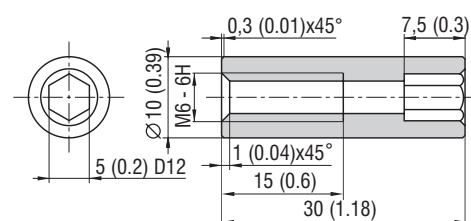


Studrod M6xL (length L see the table)

Strength class - GR.8 ISO 10.9



Studnut M6



Studrods - order numbers of separate elements or kits

M5		Torque to 8.9 Nm (6.6 lbf.ft)			
Item	Length L	Weight	Item number		Max. pressure
	[mm]	kg / 100 pcs	1pc	Kit*	[bar]
Studrod	70	1.0	20197400	16103500	350
Studrod	77	1.1	15609500	16105100	350
Studrod	82	1.2	20197600	16103600	350
Studrod	88	1.2	16679400	16105200	350
Studrod	93	1.3	24233200	33884500	350
Studrod	98	1.4	20197800	16103700	350
Studrod	102	1.4	20197900	16103800	350
Studrod	110	1.6	15609700	16103900	350
Studrod	115	1.6	20198100	16108200	350
Studrod	120	1.8	20198200	23678300	350
Studrod	125	1.8	24233300	33884800	350
Studrod	130	1.8	15609600	16104000	350
Studrod	136	1.9	15609800	16104100	350
Studrod	144	2.0	20198500	16104200	350
Studrod	150	2.1	20198600	33885000	350
Studrod	158	2.2	20198700	33885200	320
Studrod	166	2.3	20198800	23686800	320
Studrod	170	2.4	16679500	16104300	320
Studrod	177	2.5	20199000	16108300	320
Studrod	180	2.5	20199100	16104500	320
Studrod	185	2.6	20199200	16104600	320
Studrod	190	2.7	20199300	23679200	320
Studrod	202	3.0	20199400	16105300	320
Studrod	210	3.1	20199500	16104700	250
Studrod	215	3.2	20199600	16104800	250
Studrod	222	3.3	20199700	16104900	250
Studrod	230	3.4	20199800	33885600	250
Studrod	242	3.4	23698400	23685200	250
Studrod	250	3.5	20199900	16105500	200
Studrod	255	3.6	20200000	16105000	200
Studrod	262	3.7	20200100	16105400	200
Nut	M5	0.7	15630800		

M6		Torque to 14 Nm (10.3 lbf.ft)			
Item	Length L	Weight	Item number		Max. pressure
	[mm]	kg / 100 pcs	1pc	Kit*	[bar]
Studrod	92	1.9	20200200	16106800	350
Studrod	100	2.0	15610000	33881400	350
Studrod	103	2.1	20200400	16106700	350
Studrod	109	2.2	20200500	33881500	350
Studrod	115	2.4	20200600	33881600	350
Studrod	125	2.6	20200700	27483500	350
Studrod	128	2.7	20200900	33881800	350
Studrod	133	2.8	20201000	33881900	350
Studrod	136	2.8	20201100	16107900	350
Studrod	139	2.9	20201200	33882000	350
Studrod	143	3.0	15609900	16106900	350
Studrod	147	3.1	20201400	16108000	350
Studrod	152	3.2	20201500	16107000	320
Studrod	157	3.3	20201600	33882100	320
Studrod	163	3.5	20201800	33882200	320
Studrod	167	3.6	28802300	33882300	320
Studrod	172	3.7	28802500	33882400	320
Studrod	179	3.8	20201900	33882500	320
Studrod	183	3.9	20202000	33882600	320
Studrod	187	4.0	20202100	16107100	320
Studrod	194	4.1	20202300	16107200	320
Studrod	199	4.2	20202400	16108100	320
Studrod	203	4.3	20202500	16107300	250
Studrod	209	4.5	20202600	33882700	250
Studrod	219	4.7	20202700	33882800	250
Studrod	224	4.8	20202900	27484200	250
Studrod	236	5.0	20203100	16107400	250
Studrod	245	5.2	20203200	16107500	250
Studrod	253	5.4	20203300	16107800	210
Studrod	256	5.5	20203400	33883000	210
Studrod	259	5.6	20203500	33883200	210
Studrod	265	5.7	28802600	33883300	210
Studrod	273	5.9	28802700	33883500	210
Studrod	279	6.0	20203600	33883600	210
Studrod	287	6.1	20203700	16107600	210
Studrod	295	6.4	20203800	16107700	210
Studrod	300	6.5	28802800	33883700	180
Studrod	309	6.7	24233700	33883800	180
Studrod	314	6.9	28802900	33883900	180
Studrod	320	7.2	28803000	33884000	180
Studrod	328	7.5	28803200	33884100	180
Studrod	367	7.8	31044000	33884200	180
Nut	M6	1.3	16115200		

Caution!

*Kits include 4 studrods + 4 nuts

