

There is a variety of thread forms in use in the electrical industry, matching the thread form or size of the gland to that of the equipment is a fundamental problem that is solved by using thread converters.

The main thread types are:

- ISO Metric – Most IEC countries
- NPT or National Pipe Taper – Used in North America
- BSP or British Standard Pipe

ISO METRIC		
BS 3463 - 1.5mm Pitch		
METRIC SIZE	MAJOR DIA	TPI
M16	15.97	16.93
M20	19.97	16.93
M25	24.97	16.93
M32	31.97	16.93
M40	39.97	16.93
M50	49.97	16.93
M63	62.97	16.93
M75	74.97	16.93
2.0mm Pitch		
M80	79.97	12.70
M85	84.97	12.70
M90	89.97	12.70
M100	99.97	12.70

NPT		
ANSI.ASME B1.20.1		
NPT SIZE	PIPE DIA	TPI
½ NPT	21.34	14.0
¾ NPT	26.67	14.0
1 NPT	33.40	11.5
1¼ NPT	42.16	11.5
1½ NPT	48.26	11.5
2 NPT	60.33	11.5
2½ NPT	73.00	8.0
3 NPT	88.90	8.0
3½ NPT	101.60	8.0
4 NPT	114.30	8.0

ISO PIPE		
ISO R/7; UNI 6125		
SIZE	MAJOR DIA	TPI
⅜	16.66	19.0
½	20.96	14.0
¾	26.44	14.0
1	33.25	11.0
1¼	41.91	11.0
1½	47.80	11.0
2	59.61	11.0
2½	75.18	11.0
3	87.88	11.0

ISO PIPE		
DIN 40430 (Withdrawn)		
PG SIZE	MAJOR DIA	TPI
PG7	12.5	20.0
PG9	15.2	18.0
PG11	18.6	18.0
PG13.5	20.4	18.0
PG16	22.5	18.0
PG21	28.3	16.0
PG29	37.0	16.0
PG36	47.0	16.0
PG42	54.0	16.0
PG48	59.3	16.0

ET IMPERIAL CONDUIT BS31		
SIZE	MAJOR DIA	TPI
⅝	15.88	18.0
¾	19.05	16.0
1	25.40	16.0
1¼	31.75	16.0
1½	38.10	14.0
2	50.80	14.0
2½	63.50	14.0
3	76.20	14.0

ALTERNATIVE ISO PIPE	
UK	BSP Parallel or Taper BS2279 (BS21)
Europe	G (Parallel) GK (Taper) R (Parallel) RK (Taper)
Japan	PF (Parallel) JIS B 303
CIS	K mpy (Taper)

THREAD DIMENSION SUBSTITUTION CHART				
METRIC SIZE	NPT / NPS SIZE	PG SIZE	ISO PIPE SIZE	ET SIZE
M16	-	7.0	-	⅝
M16	-	9.0	-	⅝
M20	½ NPT	11.0	½	¾
M20	½ NPT	13.5	½	¾
M25	¾ NPT	16.0	¾	1
M32	1 NPT	21.0	1	1¼
M40	1¼ NPT	29.0	1¼	1½
M50	1½ NPT	36.0	1½	2
M63	2 NPT	42.0	2	2½
M63	2 NPT	48.0	2	2½
M75	2½ NPT	-	2½	3
M90x2.0	3 NPT	-	3	-
M100x2.0	3½ NPT	-	-	-

