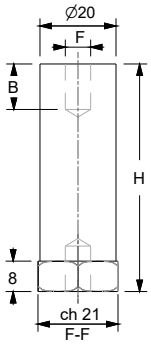
CO SERIES

AVAILABLE REFERENCES, DRAWINGS AND DIMENSIONS

Reference	F	H [mm]	V_N [V_{AC}]	UL
CO/P16	M4-M5-M6-M8	16	220	A
CO/P20	M4-M5-M6-M8	20	400	A
CO/P25	M4-M5-M6-M8	25	500	A
CO/P30	M4-M5-M6-M8	30	600	A
CO/P35	M5-M6-M8	35	600	A
CO/P40	M5-M6-M8	40	600	A
CO/P45	M5-M6-M8	45	750	A,B
CO/P50	M5-M6-M8	50	750	A,B
CO/P60	M6-M8	60	750	A,B



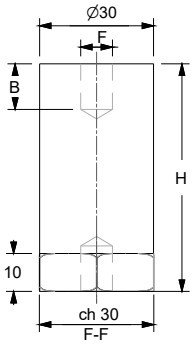


UL type A: compliance with category QEUY2/8 (components with operating voltage up to 1000 V.)
UL type B: compliance with category DLAR2/8 (components with operating voltage above 1000 V.)

CS SERIES

AVAILABLE REFERENCES, DRAWINGS AND DIMENSIONS

Reference	F	H [mm]	V_N [V_{AC}]	UL
CS/P30	M6-M8-M10	30	750	A,B
CS/P35	M6-M8-M10	35	1000	A,B
CS/P40	M6-M8-M10	40	1000	A,B
CS/P45	M6-M8-M10	45	1000	A,B
CS/P50	M6-M8-M10	50	1500	A,B
CS/P55	M6-M8-M10	55	1500	A,B
CS/P60	M6-M8-M10	60	1500	A,B
CS/P65	M6-M8-M10	65	1500	A,B
CS/P70	M6-M8-M10	70	1500	A,B



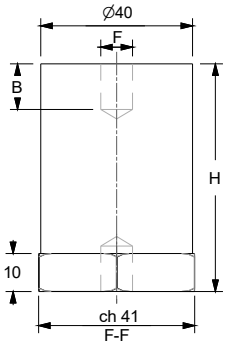


UL type A: compliance with category QEUY2/8 (components with operating voltage up to 1000 V.)
UL type B: compliance with category DLAR2/8 (components with operating voltage above 1000 V.)

CT SERIES

AVAILABLE REFERENCES, DRAWINGS AND DIMENSIONS

Reference	F	H [mm]	V_N [V_{AC}]	UL
CT/P30	M6-M8-M10	30	750	A,B
CT/P35	M8-M10	35	750	A,B
CT/P40	M8-M10-M12	40	1000	A,B
CT/P45	M8-M10-M12	45	1000	A,B
CT/P50	M8-M10-M12	50	1500	A,B
CT/P55	M8-M10	55	1500	A,B
CT/P60	M8-M10-M12	60	1500	A,B
CT/P65	M8-M10	65	1500	A,B
CT/P70	M8-M10	70	1500	A,B



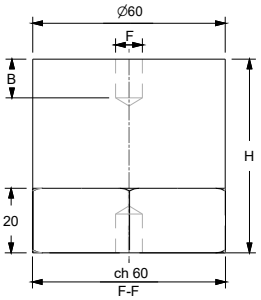


UL type A: compliance with category QEUY2/8 (components with operating voltage up to 1000 V.)
UL type B: compliance with category DLAR2/8 (components with operating voltage above 1000 V.)

CPE SERIES

AVAILABLE REFERENCES, DRAWINGS AND DIMENSIONS

Reference	F	H [mm]	V_N [V_{AC}]	UL
CPE40	M10-M12-M16	40	1500	A,B
CPE50	M10-M12-M16	50	3000	–
CPE60	M10-M12-M16	60	3000	A,B
CPE70	M10-M12-M16	70	4000	–
CPE80	M10-M12-M16	80	5000	A,B
CPE100	M10-M12-M16	100	8000	A,B

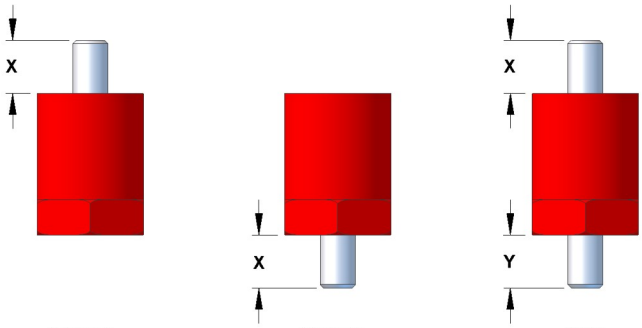




UL type A: compliance with category QEUY2/8 (components with operating voltage up to 1000 V.)
UL type B: compliance with category DLAR2/8 (components with operating voltage above 1000 V.)

OPTIONAL MALE THREADED STUDS

All C series insulators can be ordered with 1 or 2 male threaded studs when needed.



ORDER CODES

Cxx/Pxx xx – xAMxx x / xx
(1) (2) (3) (4) (5) (6) (7)

1 - General code for insulator C series type.
2 - General code for insulator subserie. (see corresponding available references table)
3 - Female connections metric thread size. (see corresponding available references table)
4 - Number of male threaded studs. 1AM for single stud, 2AM for both. (optional)
5 - When 1AM or 2AM types, length X (in mm) of male threaded stud connectors.
6 - When 1AM option, letter to identify the side of mounted stud. A for stud mounted on cylindrical side, B for its hexagonal side.
7 - When option 2AM with different lengths, length Y (in mm) of the second male threaded stud placed on hexagonal end. (optional)

Note: *Threaded stud length tolerance: ±1 mm.*

Examples:

CO/P30 M6 : Insulator type CO/P30 with M6 threaded connection drilled holes.

CT/P50 M8 – 1AM20B : Insulator type CT/P50 with M8 connection drilled holes with one threaded stud connection (M8) of 20 mm on its hexagonal end.

CT/P50 M8 – 2AM20 : Insulator type CT/P50 with M8 connection drilled holes with two threaded stud connections (M8) of the same length, 20 mm.

CPE80 M10 – 2AM20/30 : Insulator type CPE80 with M10 connection drilled holes with two threaded stud connections (M10), the one on cylindrical end of 20 mm and the other on the hexagonal end of 30 mm.

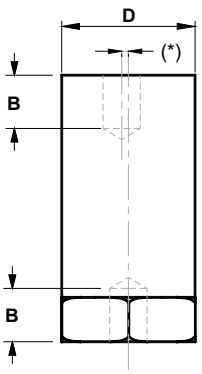
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USABLE THREADED DEPTH AND MAXIMUM TIGHTENING TORQUE

Usable threaded depth insert (B) in mm								
				Metric				
Reference	M3	M4	M5	M6	M8	M10	M12	M16
CO/P16	–	3	3	3	4	–	–	–
CO/P20	–	5	5	5	5	–	–	–
CO/P25	–	7	7	7	7	–	–	–
CO/P30	–	8	8	8	8	–	–	–
CO/P35	–	–	8	8	8	–	–	–
CO/P40	–	–	9	10	10	–	–	–
CO/P45	–	–	9	10	10	–	–	–
CO/P50	–	–	9	10	10	–	–	–
CO/P60	–	–	–	10	10	–	–	–
CS/P30	–	–	–	8	8	8	–	–
CS/P35	–	–	–	9	9	9	–	–
CS/P40	–	–	–	13	13	13	–	–
CS/P45	–	–	–	13	13	13	–	–
CS/P50	–	–	–	13	13	13	–	–
CS/P55	–	–	–	13	13	13	–	–
CS/P60	–	–	–	13	17	17	–	–
CS/P65	–	–	–	13	17	17	–	–
CS/P70	–	–	–	13	17	17	–	–
CT/P30	–	–	–	8	8	8	–	–
CT/P35	–	–	–	–	9	9	–	–
CT/P40	–	–	–	13	13	13	13	–
CT/P45	–	–	–	–	13	13	13	–
CT/P50	–	–	–	–	13	13	13	–
CT/P55	–	–	–	–	13	13	–	–
CT/P60	–	–	–	–	17	17	17	–
CT/P65	–	–	–	–	17	17	–	–
CT/P70	–	–	–	–	17	17	17	–
CPE40	–	–	–	–	–	13	13	13
CPE50	–	–	–	–	–	13	13	–
CPE60	–	–	–	–	–	17	17	18
CPE70	–	–	–	–	–	17	17	18
CPE80	–	–	–	–	–	20	20	18
CPE100	–	–	–	–	–	20	20	18

Thightening torque in Nm								
				Metric				
Reference	M3	M4	M5	M6	M8	M10	M12	M16
CO/P16	–	2	6	8	10	–	–	–
CO/P20	–	2	6	10	10	–	–	–
CO/P25	–	2	6	10	14	–	–	–
CO/P30	–	2	8	12	16	–	–	–
CO/P35	–	–	8	12	16	–	–	–
CO/P40	–	–	8	12	16	–	–	–
CO/P45	–	–	8	12	16	–	–	–
CO/P50	–	–	8	12	16	–	–	–
CO/P60	–	–	–	12	16	–	–	–
CS/P30	–	–	–	10	22	24	–	–
CS/P35	–	–	–	10	22	24	–	–
CS/P40	–	–	–	10	22	24	–	–
CS/P45	–	–	–	10	22	24	–	–
CS/P50	–	–	–	10	22	24	–	–
CS/P55	–	–	–	10	22	24	–	–
CS/P60	–	–	–	10	22	24	–	–
CS/P65	–	–	–	10	22	24	–	–
CS/P70	–	–	–	10	22	24	–	–
CT/P30	–	–	–	12	22	24	–	–
CT/P35	–	–	–	–	22	26	–	–
CT/P40	–	–	–	12	22	26	36	–
CT/P45	–	–	–	–	22	26	36	–
CT/P50	–	–	–	–	22	26	36	–
CT/P55	–	–	–	–	22	26	–	–
CT/P60	–	–	–	–	22	26	36	–
CT/P65	–	–	–	–	22	26	–	–
CT/P70	–	–	–	–	22	26	36	–
CPE40	–	–	–	–	–	24	36	50
CPE50	–	–	–	–	–	24	36	–
CPE60	–	–	–	–	–	24	36	50
CPE70	–	–	–	–	–	24	36	50
CPE80	–	–	–	–	–	24	36	55
CPE100	–	–	–	–	–	24	40	55

**All values in mm. Tolerance: B±10%*



(*) *Maximum eccentricity displacement between threaded insert and body of 3% of body nominal diameter.*

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C SERIES TECHNICAL CHARACTERISTICS

Reference	Surface flashover [kV_{AC}]	Internal flashover [kV_{AC}]	Tensile stress [kN]	Cantilever stress [kN]	Compression stress [kN]	Twisting stress [Nm]
CO/P16	-	-	4	2.5	21	6-17
CO/P20	-	-	4	2.5	21	6-17
CO/P25	5	15	4	2.5	21	6-17
CO/P30	5	15	4	2	21	10-20
CO/P40	8	20	4	1.5	21	10-20
CO/P50	10	25	4	1	21	10-20
CO/P60	10	30	4	1	21	10-20
CS/P30	8	20	9	4.5	40	13-26
CS/P40	8	25	9	3	40	13-26
CS/P50	10	35	9	2	40	13-26
CS/P60	15	35	9	1.5	40	13-26
CS/P70	15	35	9	1.1	40	13-26
CT/P30	8	20	10	7.5	80	30-60
CT/P40	10	25	10	7	80	30-60
CT/P50	10	35	10	5	80	30-60
CT/P60	10	35	10	3.7	80	30-60
CT/P70	10	35	10	2,9	80	30-60
CPE40	10	25	11	6	100	60
CPE60	20	50	15	7	100	80
CPE70	20	50	17	8	100	90
CPE80	25	50	23	9	120	100
CPE100	30	50	30	15	150	150

Operating temperature	Fire reaction	Breaking charge	Water absortion
-40ºC +130ºC	EN 45545-2 HL2 class UL94-V0 class	Tolerance ±10%	<0.2%

INSULATING MATERIAL CHARACTERISTICS (POLYGLASS)

Property	Standard	Value
Flexural strength	ISO R 178	80 N/mm²
Flexural modulus	ISO 178	7 GPa
Impact strength	ISO 179	25 kJ/m²
Hot deflection temperature	ISO 75	> 200 ºC
Hardness	UNI 4278	80 HRM
Linear shrinkage	ISO 2577	0.18%
Flammability	UL 94	V0 >3mm
Dielectric strength	IEC 60243-1	12 kV/mm
Tracking resistance	IEC 60112	CTI >600 -0.0
Arc resistance	ASTM D495	>180 s
Density	ISO 1183-1	1.8 g/cm³
Water absortion	ISO 62	<0.2 %
Color	RAL	RAL 3002 (red)

CE

Our Polyester insulators are in conformity with DIRECTIVE 2006/95/EC (Electrical equipment designed for use within certain voltage limits). Directive 2006/95/EC is a codifying Directive which brings together in one text the “original” Low Voltage Directive 73/23/EEC6 with its subsequent amendments. Directive 2006/95/EC came into force and repealed Directive 73/23/EC as from 16th January 2007. The Directive applies to all electrical equipment designed for use with a voltage rating of between 50 and 1000 V for alternating current and between 75 and 1500 V for direct current. The CE marking is placed on the electrical equipment or, where this is not practically possible, on the packaging.

UL

This polyester insulators are molded of Underwriters Laboratories Incorporated recognized flame-resistant fiberglass-reinforced polyester molding compound.

EN 45545

Conformity according to EN 45545 part 2 : Railway application- Fire protection on railway vehicles - Part 2: Requirements for fire behaviour of materials and components.
Test results :
Spread of flame : HL3 / Smoke : HL2 / Toxicity : HL3 / Heat release : HL2 / Final classification : HL2

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