

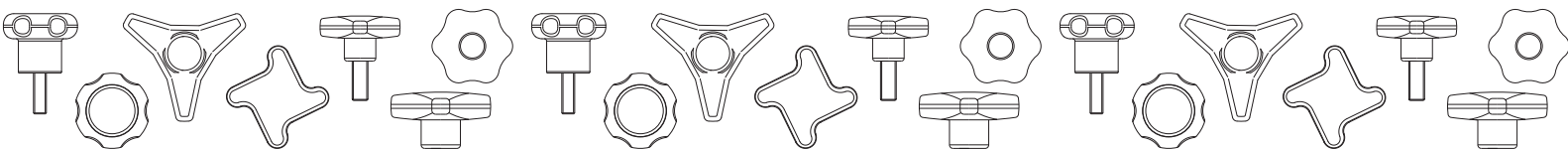


GROUP - 06

PLASTIC AND METAL SOLID LOCKING HANDWHEELS

BOTECA Plastic and Metal Solid Locking Handwheels

To prevent buildup of dirt, these handwheels do not have any recesses or holes. They are easy to clean, making them suitable for the medical and food industries. Their "solid" design also makes them the ideal solution for applications requiring a certain tightening force. Many versions offered, including stainless steel inserts, steel hubs or safety chains to prevent loss, as well as the new series of full stainless steel handwheels and some aluminium knobs. For detailed information on the specifications of each individual product please consult the technical sheet.



F110

6-LOBE SOLID KNOB WITH THREADED INSERT



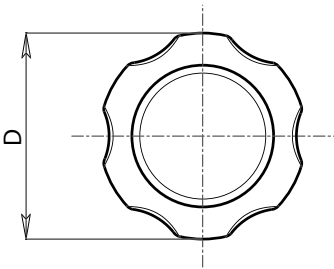
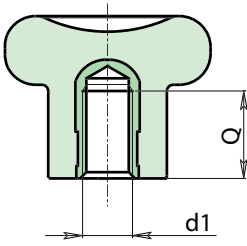
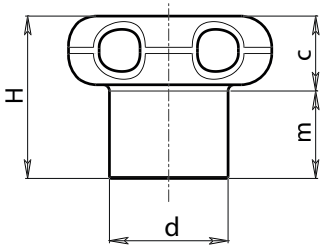
Materials:
Reinforced polyamide.
Resistant to oils and greases.

Surface finish:
Satin.

Colour:
Black (RAL 9011).

Inserts:
Brass insert with female threaded hole (thread tolerance 6H).

- Special Requests:**
- Upon request and for special quantities inserts can be supplied in different materials.
 - Upon request and for special quantities available in the colours indicated in the chart (attention: reduced range) [page].



Code	Art.	D	d	H	m	c	d1 _{6H}	Q	g
F110022.0001	F110022.TM0401	22	12	17.5	11	6.5	M4	8	5.5
F110022.0002	F110022.TM0501	22	12	17.5	11	6.5	M5	8	6.5
F110027.0002	F110027.TM0501	27	14	22	13	9	M5	10	9
F110027.0003	F110027.TM0601	27	14	22	13	9	M6	10	9.5
F110033.0002	F110033.TM0801	33	19	26	15	11	M8	13	16
F110033.0006	F110033.TM1001	33	19	26	15	11	M10	13	17

F110BF

NEW



6-LOBE SOLID KNOB MADE FROM ANTIBACTERIAL MATERIAL AND STAINLESS STEEL THREADED INSERT

Materials:

Special technopolymer reinforced with high-strength glass fibre, with inorganic silver ion additives which make the material antibacterial (ISO 22196:2011).

Resistant to oils and greases.

Surface finish:

Satin.

Colour:

Black (RAL 9011).

Inserts:

Stainless steel insert with female threaded hole (Aisi 303) (thread tolerance 6H).

Special Requests:

- None.

Notes:

The addition of a special antibacterial additive, based on inorganic silver ions, make these products naturally resistant to microbes, bacteria and fungi by preventing their formation and diffusion. The ions are released slowly, ensuring resistance over a long period even if subjected to frequent washing and sanitising. These ions remain intact at well over 200°C, and therefore suitable for resisting sterilization which normally occurs around 130°C. The material has been certified by credited laboratories and a declaration of conformity will be issued for every item delivered.

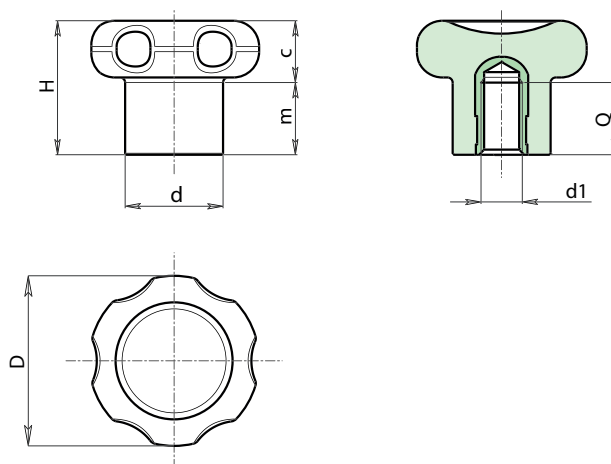
The proposed formulation complies with ISO 22196:2011 standard and in particular relates to the following strains:

- Escherichia Coli ATCC 25922
- Candida Albicans ATCC 10231
- Pseudomonas aeruginosa ATCC 13388
- Pseudomonas aeruginosa ATCC 15442
- Klebsiella pneumoniae ATCC 4352
- Staphylococcus aureus ATCC 6538

For all the tests the comparative reduction percentage ranges between 99.5% and 99.9%.



06



INOX



Code	Art.	D	d	H	m	c	d1 _{6H}	Q	g
F110022.0003	F110022.TM0501BF	22	12	17.5	11	6.5	M5	8	6.5
F110033.0003	F110033.TM0801BF	33	19	26	15	11	M8	13	16



F111

6-LOBE SOLID KNOB WITH THREADED STUD



Materials:

Reinforced polyamide.
Resistant to oils and greases.

Surface finish:

Satin.

Colour:

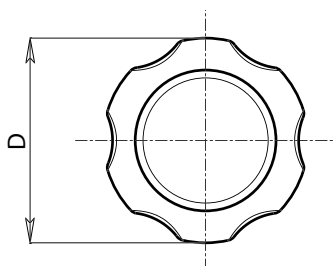
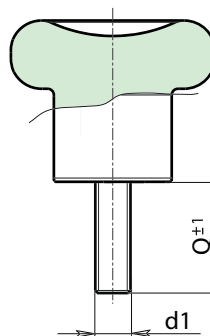
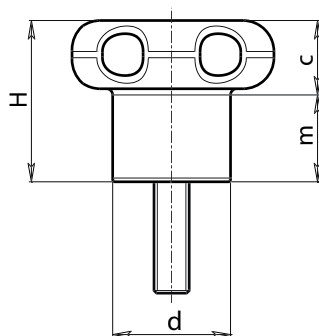
Black (RAL 9011).

Inserts:

Galvanised steel threaded stud (thread tolerance 6g).

Special Requests:

- Upon request and for special quantities inserts can be supplied with customised lengths.
- Upon request and for special quantities inserts can be supplied in different materials.
- Upon request and for special quantities available in the colours indicated in the chart (attention: reduced range) [page].



Code	Art.	D	d	H	m	c	d1 _{6g}	Q	LM	g
F111022.0001	F111022.TM04X1601	22	12	17.5	11	6.5	M4	16	50	6
F111022.0002	F111022.TM04X3001	22	12	17.5	11	6.5	M4	30	50	7
F111022.0003	F111022.TM05X1601	22	12	17.5	11	6.5	M5	16	50	7
F111022.0005	F111022.TM05X3001	22	12	17.5	11	6.5	M5	30	50	8
F111027.0001	F111027.TM05X2001	27	14	22	13	9	M5	20	60	10
F111027.0002	F111027.TM05X4001	27	14	22	13	9	M5	40	60	11
F111027.0003	F111027.TM06X2001	27	14	22	13	9	M6	20	60	12
F111027.0005	F111027.TM06X4001	27	14	22	13	9	M6	40	60	13
F111033.0001	F111033.TM08X2001	33	19	26	15	11	M8	20	70	18
F111033.0002	F111033.TM08X4001	33	19	26	15	11	M8	40	70	22
F111033.0003	F111033.TM10X2001	33	19	26	15	11	M10	20	70	24
F111033.0005	F111033.TM10X5001	33	19	26	15	11	M10	50	70	27

LM = Maximum mouldable length.



F175



6-LOBE SOLID HANDWHEEL WITH FEMALE THREADED INSERT

Materials:

Reinforced polyamide.
Resistant to oils and greases.

Surface finish:

Satin.

Colour:

Black (RAL 9011).

Inserts:

Version F175:

Brass insert with female threaded hole (thread tolerance 6H).

Version F175CIN:

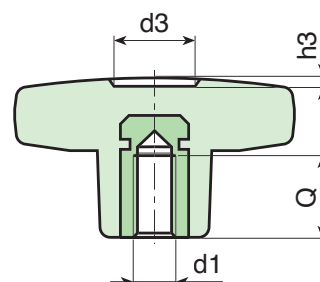
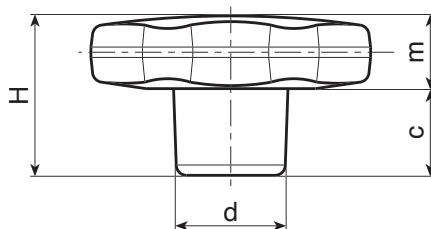
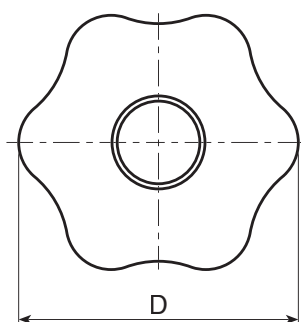
Stainless steel insert with female threaded hole (Aisi 303) (thread tolerance 6H).

Special Requests:

- Upon request and for special quantities inserts can be supplied in different materials.
- Upon request and for special quantities available in the colours indicated in the chart (attention: reduced range) [page].



06



Version F175: with brass insert.

Code	Art.	D	H	d	c	m	d3	h3	d1 _{6H}	Q	g
F17530.0001	F17530.TM0401	30	22	15	11	11	9	1.5	M4	6	11.5
F17530.0004	F17530.TM0501	30	22	15	11	11	9	1.5	M5	14	11.5
F17530.0010	F17530.TM0601	30	22	15	11	11	9	1.5	M6	10	12
F17530.0018	F17530.TM0801	30	22	15	11	11	9	1.5	M8	14	13.5
F17530.0021	F17530.TM1001	30	22	15	11	11	9	1.5	M10	14	14
F17540.0001	F17540.TM0501	40	24.5	17	12	12.5	12	1	M5	14	22
F17540.0004	F17540.TM0601	40	24.5	17	12	12.5	12	1	M6	18	22
F17540.0010	F17540.TM0801	40	24.5	17	12	12.5	12	1	M8	14	21.5
F17540.0017	F17540.TM1001	40	24.5	17	12	12.5	12	1	M10	14	21
F17550.0003	F17550.TM0601	50	29	20	15.5	13.5	14.5	1.5	M6	16	36
F17550.0006	F17550.TM0801	50	29	20	15.5	14	14.5	1.5	M8	14	36
F17550.0014	F17550.TM1001	50	29	20	15.5	13.5	14.5	1.5	M10	20	37
F17550.0022	F17550.TM1201	50	29	20	15.5	13.5	14.5	1.5	M12	18	39
F17560.0002	F17560.TM0801	60	34	24	16	18	18	1.5	M8	19	59
F17560.0006	F17560.TM1001	60	34	24	16	18	18	1.5	M10	21	59
F17560.0014	F17560.TM1201	60	34	24	16	18	18	1.5	M12	18	62
F17560.0020	F17560.TM1401	60	34	24	16	18	18	1.5	M14	19	63

Version F175CIN: with stainless steel insert (Aisi 303).

INOX

Code	Art.	D	H	d	c	m	d3	h3	d1 _{6H}	Q	g
F17530.0007	F17530.TM0501CIN	30	22	15	11	11	9	1.5	M5	14	11.5
F17530.0013	F17530.TM0601CIN	30	22	15	11	11	9	1.5	M6	10	12
F17530.0019	F17530.TM0801CIN	30	22	15	11	11	9	1.5	M8	14	13.5
F17540.0007	F17540.TM0601CIN	40	24.5	17	12	12.5	12	1	M6	16	22
F17540.0013	F17540.TM0801CIN	40	24.5	17	12	12.5	12	1	M8	14	21.5
F17540.0018	F17540.TM1001CIN	40	24.5	17	12	12.5	12	1	M10	14	21
F17550.0009	F17550.TM0801CIN	50	29	20	14	15	14.5	1.5	M8	14	36
F17550.0017	F17550.TM1001CIN	50	29	20	14	15	14.5	1.5	M10	14	37
F17550.0023	F17550.TM1201CIN	50	29	20	14	15	14.5	1.5	M12	13	39
F17560.0004	F17560.TM0801CIN	60	34	24	16	18	18	1.5	M8	19	59
F17560.0009	F17560.TM1001CIN	60	34	24	16	18	18	1.5	M10	21	59
F17560.0017	F17560.TM1201CIN	60	34	24	16	18	18	1.5	M12	18	62

F175BF

NEW

6-LOBE SOLID KNOB MADE FROM ANTIBACTERIAL MATERIAL AND STAINLESS STEEL THREADED INSERT

Materials:

Special technopolymer reinforced with high-strength glass fibre, with inorganic silver ion additives which make the material antibacterial (ISO 22196:2011). Resistant to oils and greases.

Surface finish:

Satin.

Colour:

Black (RAL 9011).

Inserts:

Stainless steel insert with female threaded hole (Aisi 303) (thread tolerance 6H).

Special Requests:

- None.

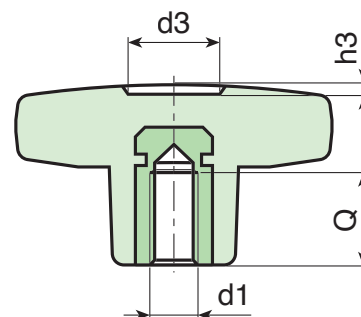
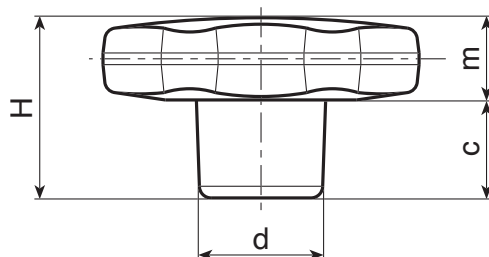
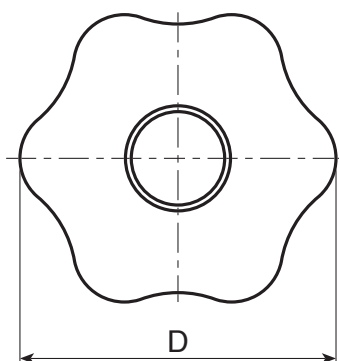
Notes:

The addition of a special antibacterial additive, based on inorganic silver ions, make these products naturally resistant to microbes, bacteria and fungi by preventing their formation and diffusion. The ions are released slowly, ensuring resistance over a long period even if subjected to frequent washing and sanitising. These ions remain intact at well over 200°C, and therefore suitable for resisting sterilization which normally occurs around 130°C. The material has been certified by credited laboratories and a declaration of conformity will be issued for every item delivered.

The proposed formulation complies with ISO 22196:2011 standard and in particular relates to the following strains:

- Escherichia Coli ATCC 25922
- Candida Albicans ATCC 10231
- Pseudomonas aeruginosa ATCC 13388
- Pseudomonas aeruginosa ATCC 15442
- Klebsiella pneumoniae ATCC 4352
- Staphylococcus aureus ATCC 6538

For all the tests the comparative reduction percentage ranges between 99.5% and 99.9%.

**INOX**

Code	Art.	D	H	d	c	m	d3	h3	d1 ^{6H}	Q	g
F17530.0005	F17530.TM0501BF	30	22	15	11	11	9	1.5	M5	14	11.5
F17530.0011	F17530.TM0601BF	30	22	15	11	11	9	1.5	M6	10	12
F17540.0005	F17540.TM0601BF	40	24.5	17	12	12.5	12	1	M6	16	22
F17540.0011	F17540.TM0801BF	40	24.5	17	12	12.5	12	1	M8	14	21.5
F17550.0007	F17550.TM0801BF	50	29	20	14	15	14.5	1.5	M8	14	36
F17550.0015	F17550.TM1001BF	50	29	20	14	15	14.5	1.5	M10	14	37
F17560.0007	F17560.TM1001BF	60	34	24	16	18	18	1.5	M10	21	59
F17560.0015	F17560.TM1201BF	60	34	24	16	18	18	1.5	M12	18	62

F175CAT



6-LOBE SOLID HANDWHEEL WITH RETAINING CHAIN AND FEMALE THREADED INSERT

Materials:

Reinforced polyamide.
Resistant to oils and greases.

Surface finish:

Satin.

Colour:

Black (RAL 9011).

Inserts:

Brass insert with female threaded hole (thread tolerance 6H).

Chain:

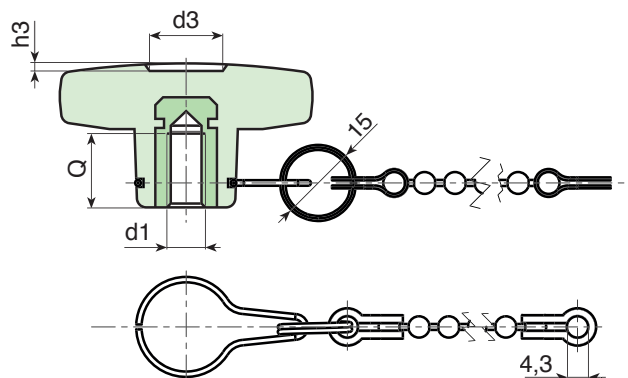
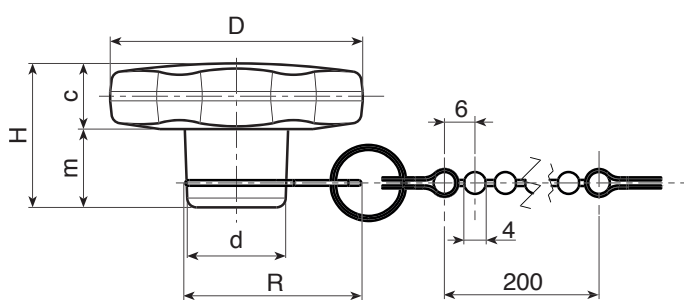
Black acetal (POM) chain. Harmonic stainless steel (Aisi 302) joints, retaining ring and hub hook.

Special Requests:

- Upon request and for special quantities inserts can be supplied in different materials.
- Upon request the chain can be supplied with customised lengths.
- Upon request and for special quantities available in the colours indicated in the chart (attention: reduced range) [page].



06



Code	Art.	D	H	d	R	c	m	d3	h3	d1 _{6H}	Q	g
F17530.0002	F17530.TM0401CAT	30	22	15	32	11	11	9	1.5	M4	6	11.5
F17530.0006	F17530.TM0501CAT	30	22	15	32	11	11	9	1.5	M5	14	11.5
F17530.0012	F17530.TM0601CAT	30	22	15	32	11	11	9	1.5	M6	10	12
F17540.0002	F17540.TM0501CAT	40	24.5	17	33	12	12.5	12	1	M5	14	22
F17540.0006	F17540.TM0601CAT	40	24.5	17	33	12	12.5	12	1	M6	18	22
F17540.0012	F17540.TM0801CAT	40	24.5	17	33	12	12.5	12	1	M8	14	21.5
F17550.0004	F17550.TM0601CAT	50	29	20	35	15.5	13.5	14.5	1.5	M6	16	36
F17550.0008	F17550.TM0801CAT	50	29	20	35	15.5	14	14.5	1.5	M8	14	36
F17550.0016	F17550.TM1001CAT	50	29	20	35	15.5	13.5	14.5	1.5	M10	20	37
F17560.0003	F17560.TM0801CAT	60	34	24	38	16	18	18	1.5	M8	19	59
F17560.0008	F17560.TM1001CAT	60	34	24	38	16	18	18	1.5	M10	21	59
F17560.0016	F17560.TM1201CAT	60	34	24	38	16	18	18	1.5	M12	18	62

F176

6-LOBE SOLID HANDWHEEL WITH INSERT AND BORE



Materials:

Reinforced polyamide.
Resistant to oils and greases.

Surface finish:

Satin.

Colour:

Black (RAL 9011).

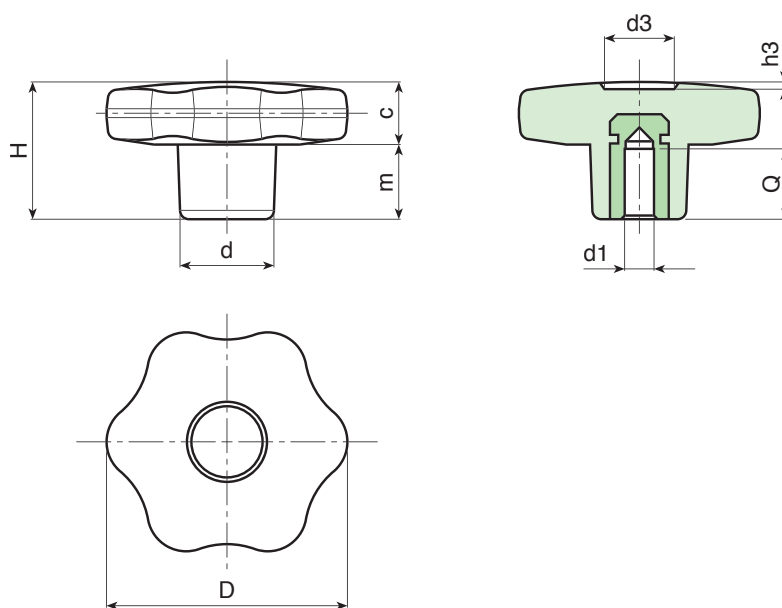
Inserts:

Brass insert with blind smooth bore (bore tolerance H9).
(*) Galvanised steel insert with blind smooth bore (bore tolerance H10).

ATTENTION: bore cannot be widened.

Special Requests:

- Upon request and for special quantities inserts can be supplied in different materials.
- Upon request and for special quantities available in the colours indicated in the chart (attention: reduced range) [page].



Code	Art.	D	H	d	c	m	d3	h3	d1 _{H9}	Q	g
F17630.0001	F17630.TD0601	30	22	15	11	11	9	1.5	6	14,5	17
F17630.0002	F17630.TD0801	30	22	15	11	11	9	1.5	8	13	19
F17640.0001	F17640.TD0601	40	24.5	17	12	12.5	12	1	6	14,5	24
F17640.0002	F17640.TD0801	40	24.5	17	12	12.5	12	1	8	13	26
F17640.0003	F17640.TD1001	40	24.5	17	12	12.5	12	1	10	17	28
F17650.0001	F17650.TD0601	50	29	20	14	15	14.5	1.5	6	14,5	39
F17650.0003	F17650.TD0801	50	29	20	14	15	14.5	1.5	8	14	41
F17650.0006	F17650.TD1001	50	29	20	14	15	14.5	1.5	10	17	42
F17660.0001	F17660.TD0801	60	34	24	16	18	18	1.5	(*) 08 (H10)	18	78
F17660.0003	F17660.TD1001	60	34	24	16	18	18	1.5	(*) 10 (H10)	25	73
F17660.0005	F17660.TD1201	60	34	24	16	18	18	1.5	(*) 12 (H10)	22	75

F177



6-LOBE SOLID HANDWHEEL WITH THREADED THROUGH-HOLE INSERT

Materials:

Reinforced polyamide.
Resistant to oils and greases.

Surface finish:

Satin.

Colour:

Black (RAL 9011).

Inserts:

Version F177:

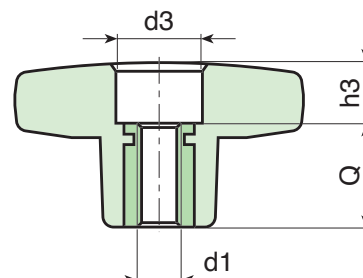
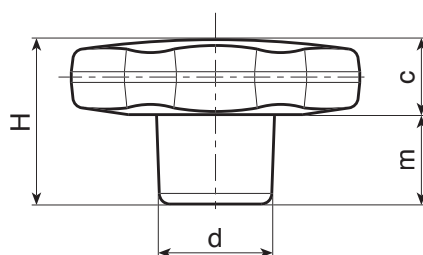
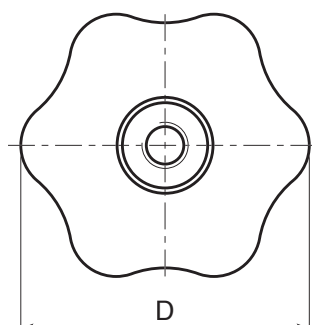
Brass insert with threaded through hole (thread tolerance 6H).

Version F177PIN:

Stainless steel insert with threaded through hole (Aisi 303) (thread tolerance 6H).

Special Requests:

- Upon request and for special quantities inserts can be supplied in different materials.
- Upon request and for special quantities available in the colours indicated in the chart (attention: reduced range) [page].



Version F177: with brass insert.

Code	Art.	D	H	d	c	m	d3	h3	d1 _{6H}	Q	g
F17730.0001	F17730.TM0501	30	22	15	11	11	11	4	M5	18	12
F17730.0005	F17730.TM0601	30	22	15	11	11	11	4	M6	18	13
F17730.0011	F17730.TM0801	30	22	15	11	11	11	4	M8	18	13
F17730.0014	F17730.TM1001	30	22	15	11	11	11	4	M10	18	14
F17740.0001	F17740.TM0601	40	24.5	17	12	12.5	12	6	M6	18	20
F17740.0008	F17740.TM0801	40	24.5	17	12	12.5	12	6	M8	18	21
F17740.0014	F17740.TM1001	40	24.5	17	12	12.5	12	6	M10	18	22
F17750.0002	F17750.TM0601	50	29	20	14	15	14	11	M6	18	33
F17750.0005	F17750.TM0801	50	29	20	14	15	14	11	M8	18	34
F17750.0010	F17750.TM1001	50	29	20	14	15	14	11	M10	18	35
F17750.0016	F17750.TM1201	50	29	20	14	15	14	11	M12	18	35
F17760.0002	F17760.TM0801	60	34	24	16	18	15	16	M8	18	54
F17760.0006	F17760.TM1001	60	34	24	16	18	15	16	M10	18	55
F17760.0010	F17760.TM1201	60	34	24	16	18	15	16	M12	18	55
F17760.0015	F17760.TM1401	60	34	24	16	18	15	16	M14	18	56

Version F177PIN: with stainless steel insert (Aisi 303).

INOX

Code	Art.	D	H	d	c	m	d3	h3	d1 _{6H}	Q	g
F17730.0003	F17730.TM0501PIN	30	22	15	11	11	11	4	M5	18	12
F17730.0007	F17730.TM0601PIN	30	22	15	11	11	11	4	M6	18	13
F17730.0012	F17730.TM0801PIN	30	22	15	11	11	11	4	M8	18	13
F17740.0003	F17740.TM0601PIN	40	24.5	17	12	12.5	12	6	M6	18	20
F17740.0010	F17740.TM0801PIN	40	24.5	17	12	12.5	12	6	M8	18	21
F17740.0015	F17740.TM1001PIN	40	24.5	17	12	12.5	12	6	M10	18	22
F17750.0008	F17750.TM0801PIN	50	29	20	14	15	14	11	M8	18	34
F17750.0012	F17750.TM1001PIN	50	29	20	14	15	14	11	M10	18	35
F17750.0017	F17750.TM1201PIN	50	29	20	14	15	14	11	M12	18	35
F17760.0004	F17760.TM0801PIN	60	34	24	16	18	15	16	M8	18	54
F17760.0008	F17760.TM1001PIN	60	34	24	16	18	15	16	M10	18	55
F17760.0012	F17760.TM1201PIN	60	34	24	16	18	15	16	M12	18	55



F177CAT



6-LOBE SOLID HANDWHEEL WITH RETAINING CHAIN AND THREADED THROUGH-HOLE INSERT

Materials:

Reinforced polyamide.
Resistant to oils and greases.

Surface finish:

Satin.

Colour:

Black (RAL 9011).

Inserts:

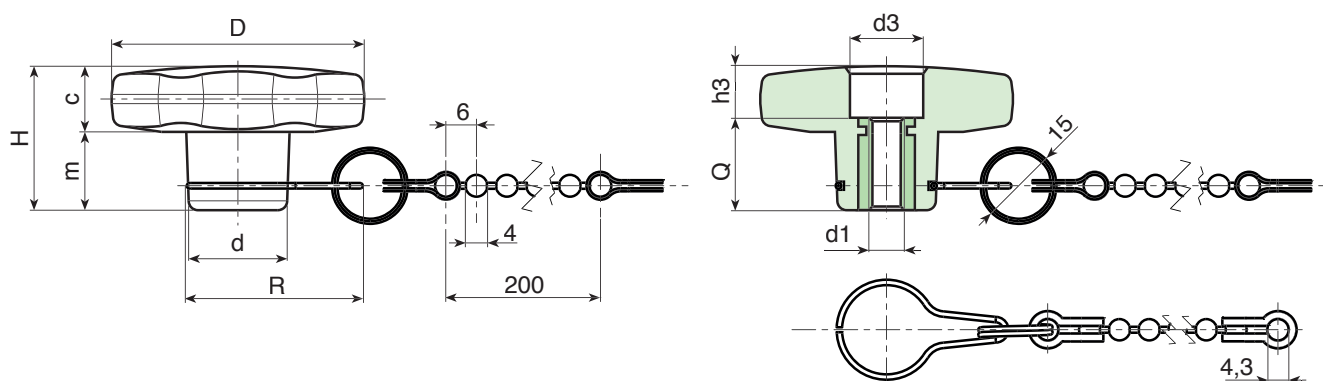
Brass insert with threaded through hole (thread tolerance 6H).

Chain:

Black acetal (POM) chain. Harmonic stainless steel (Aisi 302) joints, retaining ring and hub hook.

Special Requests:

- Upon request and for special quantities inserts can be supplied in different materials.
- Upon request the chain can be supplied with customised lengths.
- Upon request and for special quantities available in the colours indicated in the chart (attention: reduced range) [page].



Code	Art.	D	H	d	R	c	m	d3	h3	d1 _{6H}	Q	g
-	F17730.TM0501CAT	30	22	15	32	11	11	11	4	M5	18	15
-	F17730.TM0601CAT	30	22	15	32	11	11	11	4	M6	18	15
-	F17740.TM0601CAT	40	24.5	17	33	12	12.5	12	6	M6	18	23
-	F17740.TM0801CAT	40	24.5	17	33	12	12.5	12	6	M8	18	24
-	F17750.TM0601CAT	50	29	20	35	14	15	14	11	M6	18	36
-	F17750.TM0801CAT	50	29	20	35	14	15	14	11	M8	18	37
-	F17760.TM0801CAT	60	34	24	38	16	18	15	16	M8	18	57
-	F17760.TM1001CAT	60	34	24	38	16	18	15	16	M10	18	58
-	F17760.TM1201CAT	60	34	24	38	16	18	15	16	M12	18	58

F178

6-LOBE SOLID HANDWHEEL WITH THREADED STUD



Materials:

Reinforced polyamide.
Resistant to oils and greases.

Surface finish:

Satin.

Colour:

Black (RAL 9011).

Inserts:

F178:

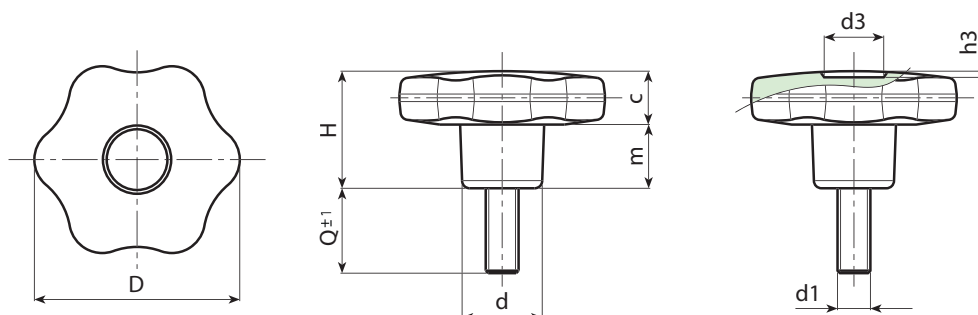
Galvanised steel threaded stud (thread tolerance 6g).

F178CIN:

Threaded stainless steel stud (Aisi 304) (thread tolerance 6g).

Special Requests:

- Upon request and for special quantities inserts can be supplied with customised lengths.
- Upon request and for special quantities inserts can be supplied in different materials.
- Upon request and for special quantities available in the colours indicated in the chart (attention: reduced range) [page].

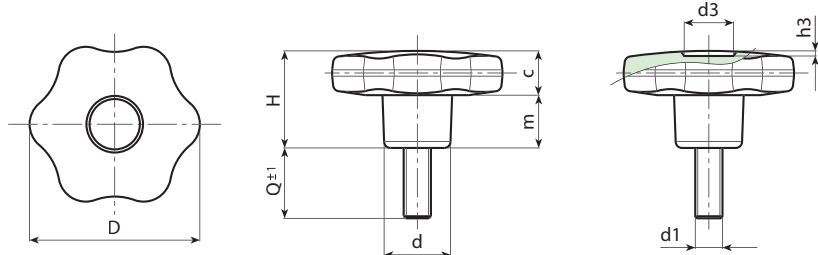


Version F178 - galvanised steel stud.

Code	Art.	D	H	d	c	m	d3	h3	LM	d1 _{6g}	Q	g
F17830.0002	F17830.TM05X1001	30	22	15	11	11	9	1.5	80	M5	10	13
F17830.0004	F17830.TM05X1601	30	22	15	11	11	9	1.5	80	M5	16	14
F17830.0008	F17830.TM05X2001	30	22	15	11	11	9	1.5	80	M5	20	15
F17830.0012	F17830.TM05X3001	30	22	15	11	11	9	1.5	80	M5	30	16
F17830.0015	F17830.TM05X4001	30	22	15	11	11	9	1.5	80	M5	40	17
F17830.0019	F17830.TM06X1001	30	22	15	11	11	9	1.5	80	M6	10	15
F17830.0023	F17830.TM06X1601	30	22	15	11	11	9	1.5	80	M6	16	16
F17830.0030	F17830.TM06X2001	30	22	15	11	11	9	1.5	80	M6	20	17
F17830.0036	F17830.TM06X2501	30	22	15	11	11	9	1.5	80	M6	25	17,5
F17830.0042	F17830.TM06X3001	30	22	15	11	11	9	1.5	80	M6	30	18
F17830.0051	F17830.TM06X4001	30	22	15	11	11	9	1.5	80	M6	40	19
F17830.0059	F17830.TM08X1601	30	22	15	11	11	9	1.5	80	M8	16	19
F17830.0063	F17830.TM08X2001	30	22	15	11	11	9	1.5	80	M8	20	21
F17830.0071	F17830.TM08X3001	30	22	15	11	11	9	1.5	80	M8	30	25
F17830.0076	F17830.TM08X4001	30	22	15	11	11	9	1.5	80	M8	40	28
F17830.0084	F17830.TM10X2001	30	22	15	11	11	9	1.5	80	M10	20	28
F17830.0087	F17830.TM10X3001	30	22	15	11	11	9	1.5	80	M10	30	33
F17830.0090	F17830.TM10X4001	30	22	15	11	11	9	1.5	80	M10	40	39
F17840.0006	F17840.TM06X1601	40	24.5	17	12	12.5	12	1	130	M6	16	25
F17840.0010	F17840.TM06X2001	40	24.5	17	12	12.5	12	1	130	M6	20	25
F17840.0016	F17840.TM06X3001	40	24.5	17	12	12.5	12	1	130	M6	30	27
F17840.0020	F17840.TM06X4001	40	24.5	17	12	12.5	12	1	130	M6	40	28
F17840.0033	F17840.TM08X1601	40	24.5	17	12	12.5	12	1	130	M8	16	28
F17840.0036	F17840.TM08X2001	40	24.5	17	12	12.5	12	1	130	M8	20	30
F17840.0040	F17840.TM08X2501	40	24.5	17	12	12.5	12	1	130	M8	25	31
F17840.0045	F17840.TM08X3001	40	24.5	17	12	12.5	12	1	130	M8	30	33
F17840.0051	F17840.TM08X3501	40	24.5	17	12	12.5	12	1	130	M8	35	34
F17840.0054	F17840.TM08X4001	40	24.5	17	12	12.5	12	1	130	M8	40	36
F17840.0057	F17840.TM08X4501	40	24.5	17	12	12.5	12	1	130	M8	45	38
F17840.0060	F17840.TM08X5001	40	24.5	17	12	12.5	12	1	130	M8	50	39

F178

6-LOBE SOLID HANDWHEEL WITH THREADED STUD



Code	Art.	D	H	d	c	m	d3	h3	LM	d1 _{6g}	Q	g
F17840.0082	F17840.TM10X2001	40	24.5	17	12	12.5	12	1	130	M10	20	37
F17840.0086	F17840.TM10X3001	40	24.5	17	12	12.5	12	1	130	M10	30	41
F17840.0092	F17840.TM10X4001	40	24.5	17	12	12.5	12	1	130	M10	40	45
F17840.0095	F17840.TM10X5001	40	24.5	17	12	12.5	12	1	130	M10	50	49
F17850.0015	F17850.TM08X1501	50	29	20	14	15	14.5	1.5	130	M8	15	48
F17850.0020	F17850.TM08X2001	50	29	20	14	15	14.5	1.5	130	M8	20	49
F17850.0025	F17850.TM08X3001	50	29	20	14	15	14.5	1.5	130	M8	30	52
F17850.0031	F17850.TM08X4001	50	29	20	14	15	14.5	1.5	130	M8	40	55
F17850.0055	F17850.TM10X2001	50	29	20	14	15	14.5	1.5	130	M10	20	55
F17850.0058	F17850.TM10X2501	50	29	20	14	15	14.5	1.5	130	M10	25	57
F17850.0062	F17850.TM10X3001	50	29	20	14	15	14.5	1.5	130	M10	30	60
F17850.0070	F17850.TM10X4001	50	29	20	14	15	14.5	1.5	130	M10	40	61
F17850.0077	F17850.TM10X5001	50	29	20	14	15	14.5	1.5	130	M10	50	64
F17850.0093	F17850.TM12X2001	50	29	20	14	15	14.5	1.5	130	M12	20	63
F17850.0096	F17850.TM12X3001	50	29	20	14	15	14.5	1.5	130	M12	30	67
F17850.0099	F17850.TM12X4001	50	29	20	14	15	14.5	1.5	130	M12	40	72
F17850.0103	F17850.TM12X5001	50	29	20	14	15	14.5	1.5	130	M12	50	77
F17860.0010	F17860.TM08X3001	60	34	24	16	18	17.5	1.5	130	M8	30	71
F17860.0013	F17860.TM08X4001	60	34	24	16	18	17.5	1.5	130	M8	40	74
F17860.0024	F17860.TM10X2001	60	34	24	16	18	17.5	1.5	130	M10	20	74
F17860.0032	F17860.TM10X3001	60	34	24	16	18	17.5	1.5	130	M10	30	80
F17860.0038	F17860.TM10X4001	60	34	24	16	18	17.5	1.5	130	M10	40	85
F17860.0041	F17860.TM10X5001	60	34	24	16	18	17.5	1.5	130	M10	50	88
F17860.0055	F17860.TM12X2001	60	34	24	16	18	17.5	1.5	130	M12	20	95
F17860.0060	F17860.TM12X3001	60	34	24	16	18	17.5	1.5	130	M12	30	102
F17860.0064	F17860.TM12X4001	60	34	24	16	18	17.5	1.5	130	M12	40	109
F17860.0068	F17860.TM12X5001	60	34	24	16	18	17.5	1.5	130	M12	50	116

Customised stud length available for a minimum of 150 pieces.
LM = Maximum mouldable length.

INOX

Version F178CIN: stainless steel stud (Aisi 304).

Code	Art.	D	H	d	c	m	d3	h3	LM	d1 _{6g}	Q	g
F17830.0006	F17830.TM05X1601CIN	30	22	15	11	11	9	1.5	80	M5	16	14
F17830.0010	F17830.TM05X2001CIN	30	22	15	11	11	9	1.5	80	M5	20	15
F17830.0017	F17830.TM05X4001CIN	30	22	15	11	11	9	1.5	80	M5	40	17
F17830.0025	F17830.TM06X1601CIN	30	22	15	11	11	9	1.5	80	M6	16	16
F17830.0032	F17830.TM06X2001CIN	30	22	15	11	11	9	1.5	80	M6	20	17
F17830.0044	F17830.TM06X3001CIN	30	22	15	11	11	9	1.5	80	M6	30	18
F17830.0053	F17830.TM06X4001CIN	30	22	15	11	11	9	1.5	80	M6	40	19
F17830.0065	F17830.TM08X2001CIN	30	22	15	11	11	9	1.5	80	M8	20	21
F17830.0073	F17830.TM08X3001CIN	30	22	15	11	11	9	1.5	80	M8	30	25
F17830.0086	F17830.TM10X2001CIN	30	22	15	11	11	9	1.5	80	M10	20	28
F17840.0012	F17840.TM06X2001CIN	40	24.5	17	12	12.5	12	1	130	M6	20	25
F17840.0018	F17840.TM06X3001CIN	40	24.5	17	12	12.5	12	1	130	M6	30	27
F17840.0022	F17840.TM06X4001CIN	40	24.5	17	12	12.5	12	1	130	M6	40	28
F17840.0038	F17840.TM08X2001CIN	40	24.5	17	12	12.5	12	1	130	M8	20	30
F17840.0048	F17840.TM08X3001CIN	40	24.5	17	12	12.5	12	1	130	M8	30	33
F17840.0056	F17840.TM08X4001CIN	40	24.5	17	12	12.5	12	1	130	M8	40	36
F17840.0094	F17840.TM10X4001CIN	40	24.5	17	12	12.5	12	1	130	M10	40	45
F17850.0033	F17850.TM08X4001CIN	50	29	20	14	15	14.5	1.5	130	M8	40	55
F17850.0057	F17850.TM10X2001CIN	50	29	20	14	15	14.5	1.5	130	M10	20	55
F17850.0065	F17850.TM10X3001CIN	50	29	20	14	15	14.5	1.5	130	M10	30	60
F17850.0072	F17850.TM10X4001CIN	50	29	20	14	15	14.5	1.5	130	M10	40	65
F17850.0079	F17850.TM10X5001CIN	50	29	20	14	15	14.5	1.5	130	M10	50	70
F17860.0015	F17860.TM08X4001CIN	60	34	24	16	18	17.5	1.5	130	M8	40	74
F17860.0040	F17860.TM10X4001CIN	60	34	24	16	18	17.5	1.5	130	M10	40	80
F17860.0057	F17860.TM12X2001CIN	60	34	24	16	18	17.5	1.5	130	M12	20	95
F17860.0066	F17860.TM12X4001CIN	60	34	24	16	18	17.5	1.5	130	M12	40	109

Customised stud length available for a minimum of 150 pieces.
LM = Maximum mouldable length.



F178CAT



6-LOBE SOLID HANDWHEEL WITH RETAINING CHAIN AND THREADED STUD

Materials:

Reinforced polyamide.
Resistant to oils and greases.

Surface finish:

Satin.

Colour:

Black (RAL 9011).

Inserts:

- (1) Galvanised steel threaded stud (thread tolerance 6g).
- (2) Galvanised steel turned ring nut, secured with threadlocker and with groove for retaining hook.

Chain:

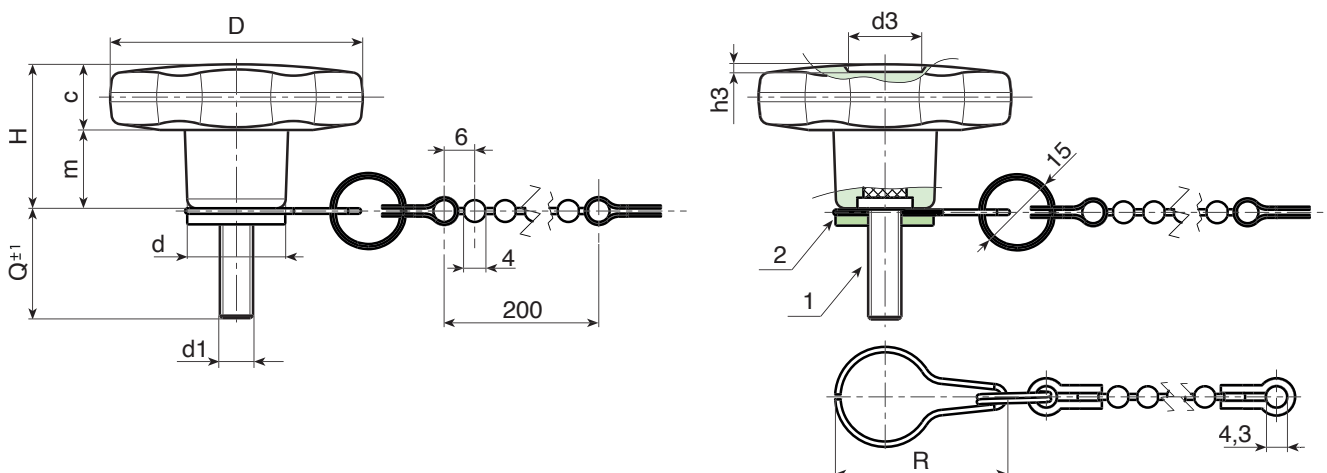
Black acetal (POM) chain. Harmonic stainless steel (Aisi 302) joints, retaining ring and hub hook.

Special Requests:

- Upon request and for special quantities inserts can be supplied with customised lengths.
- Upon request the chain can be supplied with customised lengths.
- Upon request and for special quantities inserts can be supplied in different materials.
- Upon request and for special quantities available in the colours indicated in the chart (attention: reduced range) [page].



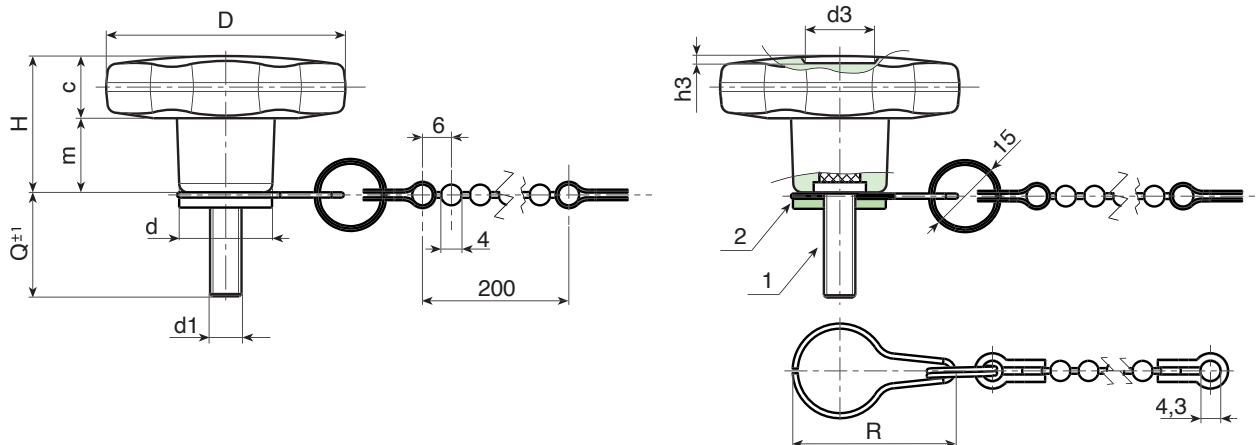
06



Code	Art.	D	H	d	R	c	m	d3	h3	LM	d1 _{6g}	Q	g
F17830.0003	F17830.TM05X1001CAT	30	22	15	32	11	11	9	1.5	80	M5	10	13
F17830.0005	F17830.TM05X1601CAT	30	22	15	32	11	11	9	1.5	80	M5	16	14
F17830.0009	F17830.TM05X2001CAT	30	22	15	32	11	11	9	1.5	80	M5	20	15
F17830.0013	F17830.TM05X3001CAT	30	22	15	32	11	11	9	1.5	80	M5	30	16
F17830.0016	F17830.TM05X4001CAT	30	22	15	32	11	11	9	1.5	80	M5	40	17
F17830.0020	F17830.TM06X1001CAT	30	22	15	32	11	11	9	1.5	80	M6	10	18
F17830.0024	F17830.TM06X1601CAT	30	22	15	32	11	11	9	1.5	80	M6	16	19
F17830.0031	F17830.TM06X2001CAT	30	22	15	32	11	11	9	1.5	80	M6	20	20
F17830.0038	F17830.TM06X2501CAT	30	22	15	32	11	11	9	1.5	80	M6	25	20,5

F178CAT

6-LOBE SOLID HANDWHEEL WITH RETAINING CHAIN AND THREADED STUD



Code	Art.	D	H	d	R	c	m	d3	h3	LM	d1 _{6g}	Q	g
F17830.0043	F17830.TM06X3001CAT	30	22	15	32	11	11	9	1.5	80	M6	30	21
F17830.0052	F17830.TM06X4001CAT	30	22	15	32	11	11	9	1.5	80	M6	40	22
F17830.0060	F17830.TM08X1601CAT	30	22	15	32	11	11	9	1.5	80	M8	16	22
F17830.0064	F17830.TM08X2001CAT	30	22	15	32	11	11	9	1.5	80	M8	20	24
F17830.0072	F17830.TM08X3001CAT	30	22	15	32	11	11	9	1.5	80	M8	30	28
F17830.0077	F17830.TM08X4001CAT	30	22	15	32	11	11	9	1.5	80	M8	40	31
F17830.0085	F17830.TM10X2001CAT	30	22	15	32	11	11	9	1.5	80	M10	20	31
F17830.0088	F17830.TM10X3001CAT	30	22	15	32	11	11	9	1.5	80	M10	30	36
F17830.0091	F17830.TM10X4001CAT	30	22	15	32	11	11	9	1.5	80	M10	40	42
F17840.0007	F17840.TM06X1601CAT	40	24.5	17	33	12	12.5	12	1	130	M6	16	28
F17840.0011	F17840.TM06X2001CAT	40	24.5	17	33	12	12.5	12	1	130	M6	20	28
F17840.0017	F17840.TM06X3001CAT	40	24.5	17	33	12	12.5	12	1	130	M6	30	30
F17840.0021	F17840.TM06X4001CAT	40	24.5	17	33	12	12.5	12	1	130	M6	40	31
F17840.0034	F17840.TM08X1601CAT	40	24.5	17	33	12	12.5	12	1	130	M8	16	31
F17840.0037	F17840.TM08X2001CAT	40	24.5	17	33	12	12.5	12	1	130	M8	20	33
F17840.0041	F17840.TM08X2501CAT	40	24.5	17	33	12	12.5	12	1	130	M8	25	34
F17840.0046	F17840.TM08X3001CAT	40	24.5	17	33	12	12.5	12	1	130	M8	30	36
F17840.0052	F17840.TM08X3501CAT	40	24.5	17	33	12	12.5	12	1	130	M8	35	37
F17840.0055	F17840.TM08X4001CAT	40	24.5	17	33	12	12.5	12	1	130	M8	40	39
F17840.0058	F17840.TM08X4501CAT	40	24.5	17	33	12	12.5	12	1	130	M8	45	41
F17840.0061	F17840.TM08X5001CAT	40	24.5	17	33	12	12.5	12	1	130	M8	50	42
F17840.0083	F17840.TM10X2001CAT	40	24.5	17	33	12	12.5	12	1	130	M10	20	40
F17840.0087	F17840.TM10X3001CAT	40	24.5	17	33	12	12.5	12	1	130	M10	30	44
F17840.0093	F17840.TM10X4001CAT	40	24.5	17	33	12	12.5	12	1	130	M10	40	48
F17840.0096	F17840.TM10X5001CAT	40	24.5	17	33	12	12.5	12	1	130	M10	50	52
F17850.0016	F17850.TM08X1501CAT	50	29	20	35	14	15	14.5	1.5	130	M8	15	51
F17850.0021	F17850.TM08X2001CAT	50	29	20	35	14	15	14.5	1.5	130	M8	20	52
F17850.0026	F17850.TM08X3001CAT	50	29	20	35	14	15	14.5	1.5	130	M8	30	55
F17850.0032	F17850.TM08X4001CAT	50	29	20	35	14	15	14.5	1.5	130	M8	40	58
F17850.0056	F17850.TM10X2001CAT	50	29	20	35	14	15	14.5	1.5	130	M10	20	58
F17850.0059	F17850.TM10X2501CAT	50	29	20	35	14	15	14.5	1.5	130	M10	25	60
F17850.0064	F17850.TM10X3001CAT	50	29	20	35	14	15	14.5	1.5	130	M10	30	63
F17850.0071	F17850.TM10X4001CAT	50	29	20	35	14	15	14.5	1.5	130	M10	40	64
F17850.0078	F17850.TM10X5001CAT	50	29	20	35	14	15	14.5	1.5	130	M10	50	67
F17850.0094	F17850.TM12X2001CAT	50	29	20	35	14	15	14.5	1.5	130	M12	20	66
F17850.0097	F17850.TM12X3001CAT	50	29	20	35	14	15	14.5	1.5	130	M12	30	70
F17850.0100	F17850.TM12X4001CAT	50	29	20	35	14	15	14.5	1.5	130	M12	40	75
F17850.0104	F17850.TM12X5001CAT	50	29	20	35	14	15	14.5	1.5	130	M12	50	80
F17860.0011	F17860.TM08X3001CAT	60	34	24	38	16	18	18	1.5	130	M8	30	74
F17860.0014	F17860.TM08X4001CAT	60	34	24	38	16	18	18	1.5	130	M8	40	77
F17860.0025	F17860.TM10X2001CAT	60	34	24	38	16	18	17.5	1.5	130	M10	20	77
F17860.0033	F17860.TM10X3001CAT	60	34	24	38	16	18	17.5	1.5	130	M10	30	83
F17860.0039	F17860.TM10X4001CAT	60	34	24	38	16	18	17.5	1.5	130	M10	40	88
F17860.0042	F17860.TM10X5001CAT	60	34	24	38	16	18	17.5	1.5	130	M10	50	91
F17860.0056	F17860.TM12X2001CAT	60	34	24	38	16	18	18	1.5	130	M12	20	98
F17860.0061	F17860.TM12X3001CAT	60	34	24	38	16	18	18	1.5	130	M12	30	105
F17860.0065	F17860.TM12X4001CAT	60	34	24	38	16	18	18	1.5	130	M12	40	112
F17860.0069	F17860.TM12X5001CAT	60	34	24	38	16	18	18	1.5	130	M12	50	119

LM = Maximum mouldable length.



F186

SOLID STAR HANDWHEEL WITH FEMALE THREADED INSERT



Materials:

Reinforced polyamide.
Resistant to oils and greases.

Surface finish:

Satin.

Colour:

Black (RAL 9011).

Inserts:

Version F186:

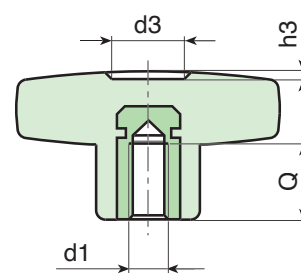
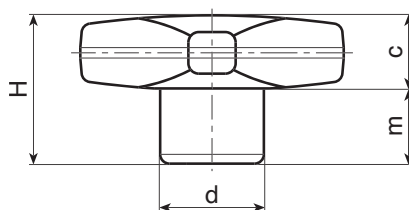
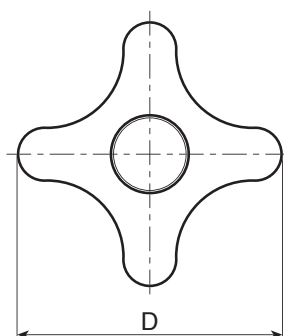
Brass insert with female threaded hole (thread tolerance 6H).

Version F186CIN:

Stainless steel insert with female threaded hole (Aisi 303) (thread tolerance 6H).

Special Requests:

- Upon request and for special quantities inserts can be supplied in different materials.
- Upon request and for special quantities available in the colours indicated in the chart (attention: reduced range) [page].



Version F186: with brass insert.

Code	Art.	D	H	d	c	m	d3	h3	d1 _{6H}	Q	g
F18632.0001	F18632.TM0401	32	23	15	11	12	11	1.5	M4	7	11
F18632.0004	F18632.TM0501	32	23	15	11	12	11	1.5	M5	14	11.5
F18632.0008	F18632.TM0601	32	23	15	11	12	11	1.5	M6	10	12
F18632.0012	F18632.TM0801	32	23	15	11	12	11	1.5	M8	14	12.5
F18632.0014	F18632.TM1001	32	23	15	11	12	11	1.5	M10	14	13
F18640.0002	F18640.TM0501	40	24.5	16	12	12.5	13	1.5	M5	14	14
F18640.0005	F18640.TM0601	40	24.5	16	12	12.5	13	1.5	M6	16	15
F18640.0009	F18640.TM0801	40	24.5	16	12	12.5	13	1.5	M8	14	16
F18640.0014	F18640.TM1001	40	24.5	16	12	12.5	13	1.5	M10	14	17
F18650.0003	F18650.TM0601	50	29	20	14	15	14	2	M6	16	25
F18650.0007	F18650.TM0801	50	29	20	14	15	14	2	M8	14	26
F18650.0012	F18650.TM1001	50	29	20	14	15	14	2	M10	14	27
F18650.0017	F18650.TM1201	50	29	20	14	15	14	2	M12	18	29
F18660.0001	F18660.TM0801	60	34	24	15.5	18.5	18	2	M8	19	40
F18660.0005	F18660.TM1001	60	34	24	15.5	18.5	18	2	M10	21	43
F18660.0009	F18660.TM1201	60	34	24	15.5	18.5	18	2	M12	18	44
F18660.0013	F18660.TM1401	60	34	24	15.5	18.5	18	2	M14	19	47

Version F186CIN: with stainless steel insert (Aisi 303).

INOX

Code	Art.	D	H	d	c	m	d3	h3	d1 _{6H}	Q	g
F18632.0006	F18632.TM0501CIN	32	23	15	11	12	11	1.5	M5	14	11.5
F18632.0010	F18632.TM0601CIN	32	23	15	11	12	11	1.5	M6	10	12
F18632.0013	F18632.TM0801CIN	32	23	15	11	12	11	1.5	M8	14	12.5
F18640.0007	F18640.TM0601CIN	40	24.5	16	12	12.5	13	1.5	M6	16	15
F18640.0011	F18640.TM0801CIN	40	24.5	16	12	12.5	13	1.5	M8	14	16
F18640.0015	F18640.TM1001CIN	40	24.5	16	12	12.5	13	1.5	M10	14	17
F18650.0009	F18650.TM0801CIN	50	29	20	14	15	14	2	M8	14	26
F18650.0014	F18650.TM1001CIN	50	29	20	14	15	14	2	M10	14	27
F18650.0018	F18650.TM1201CIN	50	29	20	14	15	14	2	M12	18	29
F18660.0003	F18660.TM0801CIN	60	34	24	15.5	18.5	18	2	M8	19	40
F18660.0007	F18660.TM1001CIN	60	34	24	15.5	18.5	18	2	M10	21	43
F18660.0011	F18660.TM1201CIN	60	34	24	15.5	18.5	18	2	M12	18	44

F186CAT



SOLID STAR HANDWHEEL WITH RETAINING CHAIN AND FEMALE THREADED INSERT

Materials:

Reinforced polyamide.
Resistant to oils and greases.

Surface finish:

Satin.

Colour:

Black (RAL 9011).

Inserts:

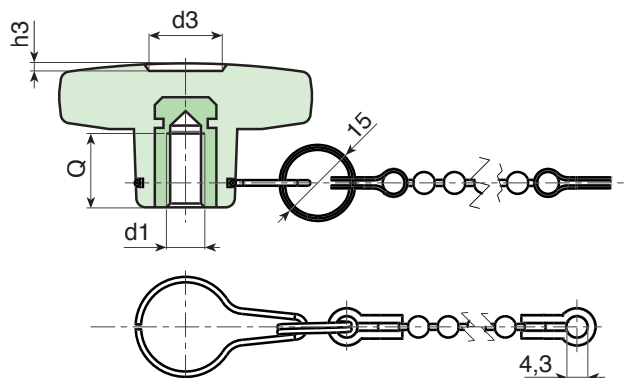
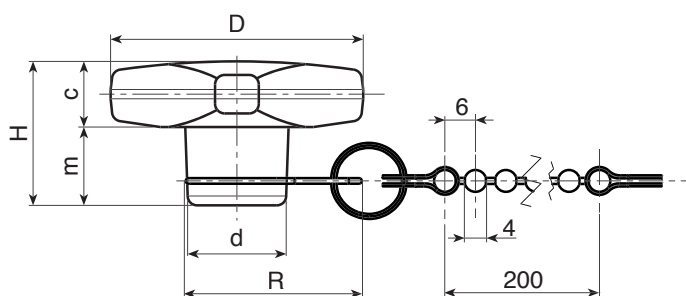
Brass insert with female threaded hole (thread tolerance 6H).

Chain:

Black acetal (POM) chain. Harmonic stainless steel (Aisi 302) joints, retaining ring and hub hook.

Special Requests:

- Upon request and for special quantities inserts can be supplied in different materials.
- Upon request the chain can be supplied with customised lengths.
- Upon request and for special quantities available in the colours indicated in the chart (attention: reduced range) [page].



Code	Art.	D	H	d	R	c	m	d3	h3	d1 _{6H}	Q	g
F18632.0002	F18632.TM0401CAT	32	23	15	32	11	12	11	1.5	M4	7	14
F18632.0005	F18632.TM0501CAT	32	23	15	32	11	12	11	1.5	M5	14	14.5
F18632.0009	F18632.TM0601CAT	32	23	15	32	11	12	11	1.5	M6	10	15
F18640.0003	F18640.TM0501CAT	40	24.5	16	33	12	12.5	13	1.5	M5	14	17
F18640.0006	F18640.TM0601CAT	40	24.5	16	33	12	12.5	13	1.5	M6	16	18
F18640.0010	F18640.TM0801CAT	40	24.5	16	33	12	12.5	13	1.5	M8	14	19
F18650.0004	F18650.TM0601CAT	50	29	20	35	14	15	14	2	M6	16	28
F18650.0008	F18650.TM0801CAT	50	29	20	35	14	15	14	2	M8	14	29
F18650.0013	F18650.TM1001CAT	50	29	20	35	14	15	14	2	M10	14	30
F18660.0002	F18660.TM0801CAT	60	34	24	38	15.5	18.5	18	2	M8	19	43
F18660.0006	F18660.TM1001CAT	60	34	24	38	15.5	18.5	18	2	M10	21	46
F18660.0010	F18660.TM1201CAT	60	34	24	38	15.5	18.5	18	2	M12	18	47

F187



SOLID STAR HANDWHEEL WITH INSERT AND SMOOTH BORE

Materials:

Reinforced polyamide.
Resistant to oils and greases.

Surface finish:

Satin.

Colour:

Black (RAL 9011).

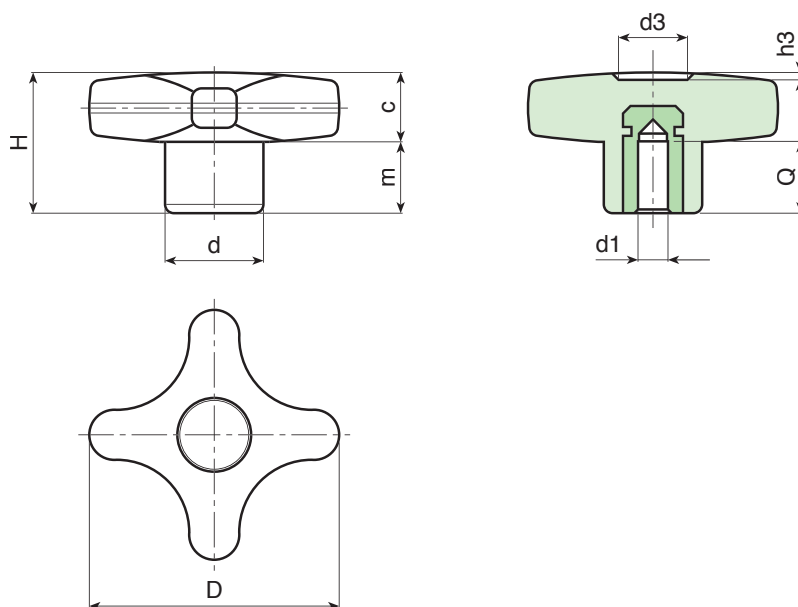
Inserts:

Brass insert with blind smooth bore (bore tolerance H7)

ATTENTION: bore cannot be widened.

Special Requests:

- Upon request and for special quantities inserts can be supplied in different materials.
- Upon request and for special quantities available in the colours indicated in the chart (attention: reduced range) [page].



Code	Art.	D	H	d	c	m	d3	h3	d1H7	Q	g
F18732.0001	F18732.TD0601	32	23	15	11	12	11	1.5	6	15	13
F18732.0002	F18732.TD0801	32	23	15	11	12	11	1.5	8	15	14
F18740.0004	F18740.TD0601	40	24.5	16	12	12.5	13	1.5	6	15	18
F18740.0001	F18740.TD0801	40	24.5	16	12	12.5	13	1.5	8	15	21
F18740.0002	F18740.TD1001	40	24.5	16	12	12.5	13	1.5	10	17	20
F18750.0001	F18750.TD0601	50	29	20	14	15	14	2	6	15	29
F18750.0002	F18750.TD0801	50	29	20	14	15	14	2	8	15	31
F18750.0005	F18750.TD1001	50	29	20	14	15	14	2	10	17	32
F18760.0001	F18760.TD0801	60	34	24	15.5	18.5	18	2	8	18	70
F18760.0002	F18760.TD1001	60	34	24	15.5	18.5	18	2	10	25	65
F18760.0003	F18760.TD1201	60	34	24	15.5	18.5	18	2	12	22	60

F188

SOLID STAR HANDWHEEL WITH THREADED THROUGH-HOLE INSERT



Materials:

Reinforced polyamide.
Resistant to oils and greases.

Surface finish:

Satin.

Colour:

Black (RAL 9011).

Inserts:

Version F188:

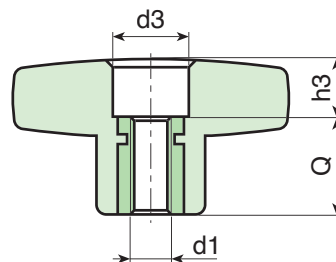
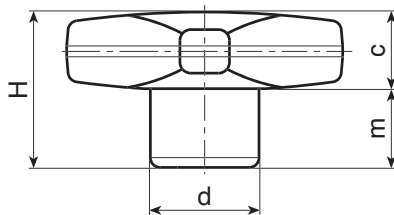
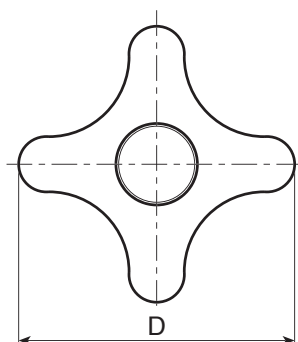
Brass insert with threaded through hole (thread tolerance 6H).

Version F188PIN:

Stainless steel insert with threaded through hole (Aisi 303) (thread tolerance 6H).

Special Requests:

- Upon request and for special quantities inserts can be supplied in different materials.
- Upon request and for special quantities available in the colours indicated in the chart (attention: reduced range) [page].



Version F188: with brass insert.

Code	Art.	D	H	d	c	m	d3	h3	d1 _{6H}	Q	g
F18832.0001	F18832.TM0401	32	23	15	11	11	10	5	M4	18	9
F18832.0004	F18832.TM0501	32	23	15	11	11	10	5	M5	18	10
F18832.0008	F18832.TM0601	32	23	15	11	11	10	5	M6	18	10.5
F18832.0013	F18832.TM0801	32	23	15	11	11	10	5	M8	18	11
F18840.0002	F18840.TM0601	40	24.5	16	12	12.5	12	6.5	M6	18	13
F18840.0007	F18840.TM0801	40	24.5	16	12	12.5	12	6.5	M8	18	15
F18840.0013	F18840.TM1001	40	24.5	16	12	12.5	12	6.5	M10	18	16
F18850.0001	F18850.TM0601	50	29	20	14	15	14	11	M6	18	23
F18850.0004	F18850.TM0801	50	29	20	14	15	14	11	M8	18	24
F18850.0008	F18850.TM1001	50	29	20	14	15	14	11	M10	18	25
F18850.0012	F18850.TM1201	50	29	20	14	15	14	11	M12	18	26
F18860.0001	F18860.TM0801	60	34	24	15.5	18.5	16	16	M8	18	34
F18860.0005	F18860.TM1001	60	34	24	15.5	18.5	16	16	M10	18	38
F18860.0009	F18860.TM1201	60	34	24	15.5	18.5	16	16	M12	18	40
F18860.0013	F18860.TM1401	60	34	24	15.5	18.5	16	16	M14	18	45

Version F188PIN: with stainless steel insert (Aisi 303).

INOX

Code	Art.	D	H	d	c	m	d3	h3	d1 _{6H}	Q	g
F18832.0006	F18832.TM0501PIN	32	23	15	11	11	10	5	M5	18	10
F18832.0010	F18832.TM0601PIN	32	23	15	11	11	10	5	M6	18	10.5
F18832.0014	F18832.TM0801PIN	32	23	15	11	11	10	5	M8	18	11
F18840.0004	F18840.TM0601PIN	40	24.5	16	12	12.5	12	6.5	M6	18	13
F18840.0009	F18840.TM0801PIN	40	24.5	16	12	12.5	12	6.5	M8	18	15
F18840.0014	F18840.TM1001PIN	40	24.5	16	12	12.5	12	6.5	M10	18	16
F18850.0006	F18850.TM0801PIN	50	29	20	14	15	14	11	M8	18	24
F18850.0010	F18850.TM1001PIN	50	29	20	14	15	14	11	M10	18	25
F18850.0013	F18850.TM1201PIN	50	29	20	14	15	14	11	M12	18	26
F18860.0003	F18860.TM0801PIN	60	34	24	15.5	18.5	16	16	M8	18	34
F18860.0007	F18860.TM1001PIN	60	34	24	15.5	18.5	16	16	M10	18	38
F18860.0011	F18860.TM1201PIN	60	34	24	15.5	18.5	16	16	M12	18	40



F188CAT



SOLID STAR HANDWHEEL WITH RETAINING CHAIN AND THREADED THROUGH-HOLE INSERT

Materials:

Reinforced polyamide.
Resistant to oils and greases.

Surface finish:

Satin.

Colour:

Black (RAL 9011).

Inserts:

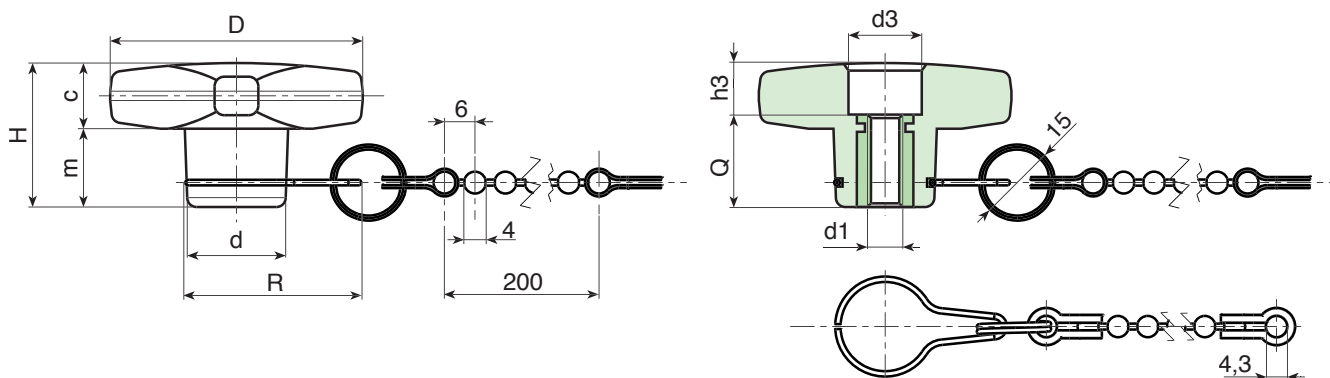
Brass insert with threaded through hole (thread tolerance 6H).

Chain:

Black acetal (POM) chain. Harmonic stainless steel (Aisi 302) joints, retaining ring and hub hook.

Special Requests:

- Upon request and for special quantities inserts can be supplied in different materials.
- Upon request the chain can be supplied with customised lengths.
- Upon request and for special quantities available in the colours indicated in the chart (attention: reduced range) [page].



Code	Art.	D	H	d	R	c	m	d3	h3	d1 _{6H}	Q	g
F18832.0002	F18832.TM0401CAT	32	23	15	32	11	11	10	5	M4	18	12
F18832.0005	F18832.TM0501CAT	32	23	15	32	11	11	10	5	M5	18	13
F18832.0009	F18832.TM0601CAT	32	23	15	32	11	11	10	5	M6	18	13.5
F18840.0003	F18840.TM0601CAT	40	24.5	16	33	12	12.5	12	6.5	M6	18	16
F18840.0008	F18840.TM0801CAT	40	24.5	16	33	12	12.5	12	6.5	M8	18	18
F18850.0002	F18850.TM0601CAT	50	29	20	35	14	15	14	11	M6	18	26
F18850.0005	F18850.TM0801CAT	50	29	20	35	14	15	14	11	M8	18	27
F18850.0009	F18850.TM1001CAT	50	29	20	35	14	15	14	11	M10	18	28
F18860.0002	F18860.TM0801CAT	60	34	24	38	15.5	18.5	16	16	M8	18	37
F18860.0006	F18860.TM1001CAT	60	34	24	38	15.5	18.5	16	16	M10	18	41
F18860.0010	F18860.TM1201CAT	60	34	24	38	15.5	18.5	16	16	M12	18	43

F189

SOLID STAR HANDWHEEL WITH THREADED STUD



Materials:

Reinforced polyamide.
Resistant to oils and greases.

Surface finish:

Satin.

Colour:

Black (RAL 9011).

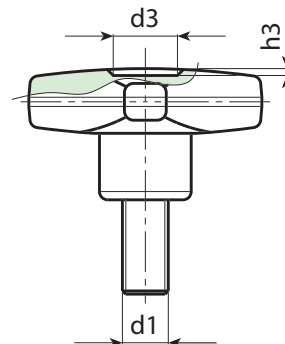
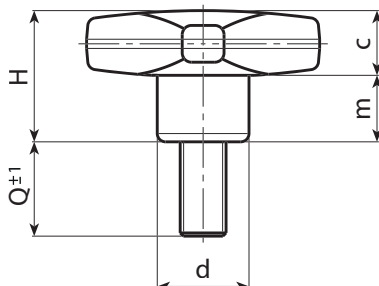
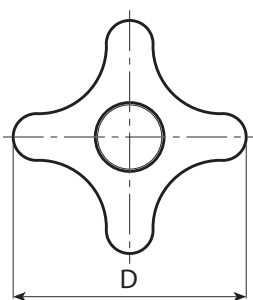
Inserts:

F189:
Galvanised steel threaded stud (thread tolerance 6g).

F189CIN:
Threaded stainless steel stud (Aisi 304) (thread tolerance 6g).

Special Requests:

- Upon request and for special quantities inserts can be supplied with customised lengths.
- Upon request and for special quantities inserts can be supplied in different materials.
- Upon request and for special quantities available in the colours indicated in the chart (attention: reduced range) [page].



Version F189 - galvanised steel stud.

Code	Art.	D	H	d	c	m	d3	h3	LM	d1 _{6g}	Q	g
F18932.0004	F18932.TM05X1601	32	23	15	11	11	9	1.5	80	M5	16	14
F18932.0008	F18932.TM05X2001	32	23	15	11	11	9	1.5	80	M5	20	15
F18932.0012	F18932.TM05X3001	32	23	15	11	11	9	1.5	80	M5	30	16
F18932.0020	F18932.TM06X1601	32	23	15	11	11	9	1.5	80	M6	16	15
F18932.0024	F18932.TM06X2001	32	23	15	11	11	9	1.5	80	M6	20	16
F18932.0029	F18932.TM06X3001	32	23	15	11	11	9	1.5	80	M6	30	17
F18932.0037	F18932.TM08X1601	32	23	15	11	11	9	1.5	80	M8	16	19
F18932.0040	F18932.TM08X2001	32	23	15	11	11	9	1.5	80	M8	20	21
F18932.0043	F18932.TM08X3001	32	23	15	11	11	9	1.5	80	M8	30	23
F18932.0046	F18932.TM08X4001	32	23	15	11	11	9	1.5	80	M8	40	25
F18932.0049	F18932.TM10X2001	32	23	15	11	11	9	1.5	80	M10	20	24
F18932.0052	F18932.TM10X3001	32	23	15	11	11	9	1.5	80	M10	30	27
F18932.0056	F18932.TM10X4001	32	23	15	11	11	9	1.5	80	M10	40	30
F18940.0003	F18940.TM06X1501	40	24.5	17	12	12.5	12	1	80	M6	15	20
F18940.0009	F18940.TM06X2001	40	24.5	17	12	12.5	12	1	80	M6	20	20
F18940.0016	F18940.TM06X3001	40	24.5	17	12	12.5	12	1	80	M6	30	21
F18940.0022	F18940.TM06X4001	40	24.5	17	12	12.5	12	1	80	M6	40	22
F18940.0025	F18940.TM06X5001	40	24.5	17	12	12.5	12	1	80	M6	50	25
F18940.0033	F18940.TM08X1601	40	24.5	17	12	12.5	12	1	80	M8	16	22
F18940.0037	F18940.TM08X2001	40	24.5	17	12	12.5	12	1	80	M8	20	24
F18940.0042	F18940.TM08X3001	40	24.5	17	12	12.5	12	1	80	M8	30	29
F18940.0050	F18940.TM08X4001	40	24.5	17	12	12.5	12	1	80	M8	40	33
F18940.0058	F18940.TM08X5001	40	24.5	17	12	12.5	12	1	80	M8	50	37
F18940.0068	F18940.TM10X1501	40	24.5	17	12	12.5	12	1	80	M10	15	28,5
F18940.0070	F18940.TM10X2001	40	24.5	17	12	12.5	12	1	80	M10	20	30
F18940.0074	F18940.TM10X3001	40	24.5	17	12	12.5	12	1	80	M10	30	35
F18940.0079	F18940.TM10X5001	40	24.5	17	12	12.5	12	1	80	M10	50	47
F18950.0010	F18950.TM08X2001	50	29	20	14	15	14.5	1.5	80	M8	20	38
F18950.0015	F18950.TM08X3001	50	29	20	14	15	14.5	1.5	80	M8	30	42
F18950.0021	F18950.TM08X4001	50	29	20	14	15	14.5	1.5	80	M8	40	46

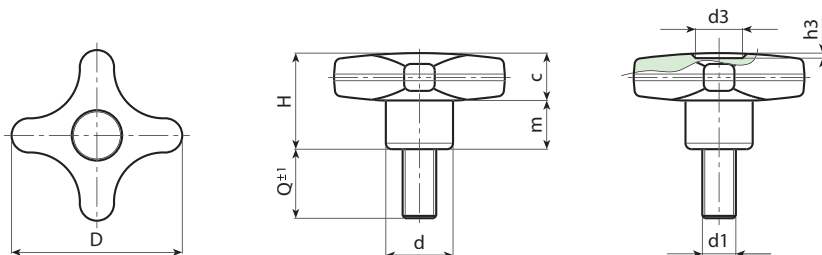
LM = Maximum mouldable length.

Customised stud lengths available for a minimum of 150 pieces.



F189

SOLID STAR HANDWHEEL WITH THREADED STUD



06

Version F189 - galvanised steel stud.

Code	Art.	D	H	d	c	m	d3	h3	LM	d1 _{6g}	Q	g
F18950.0033	F18950.TM10X2001	50	29	20	14	15	14.5	1.5	80	M10	20	49
F18950.0037	F18950.TM10X3001	50	29	20	14	15	14.5	1.5	80	M10	30	55
F18950.0042	F18950.TM10X4001	50	29	20	14	15	14.5	1.5	80	M10	40	61
F18950.0045	F18950.TM10X5001	50	29	20	14	15	14.5	1.5	80	M10	50	65
F18950.0055	F18950.TM12X3001	50	29	20	14	15	14.5	1.5	80	M12	30	57
F18950.0059	F18950.TM12X5001	50	29	20	14	15	14.5	1.5	80	M12	50	70
F18960.0008	F18960.TM08X1501	60	34	24	15.5	18.5	18	1.5	80	M8	15	45,5
F18960.0010	F18960.TM08X2001	60	34	24	15.5	18.5	18	1.5	80	M8	20	47
F18960.0013	F18960.TM08X3001	60	34	24	15.5	18.5	18	1.5	80	M8	30	50
F18960.0016	F18960.TM08X4001	60	34	24	15.5	18.5	18	1.5	80	M8	40	53
F18960.0021	F18960.TM10X2001	60	34	24	15.5	18.5	18	1.5	80	M10	20	72
F18960.0026	F18960.TM10X3001	60	34	24	15.5	18.5	18	1.5	80	M10	30	72
F18960.0030	F18960.TM10X4001	60	34	24	15.5	18.5	18	1.5	80	M10	40	72
F18960.0034	F18960.TM10X5001	60	34	24	15.5	18.5	18	1.5	80	M10	50	72
F18960.0041	F18960.TM12X2001	60	34	24	15.5	18.5	18	1.5	80	M12	20	78
F18960.0045	F18960.TM12X3001	60	34	24	15.5	18.5	18	1.5	80	M12	30	85
F18960.0049	F18960.TM12X4001	60	34	24	15.5	18.5	18	1.5	80	M12	40	91
F18960.0052	F18960.TM12X5001	60	34	24	15.5	18.5	18	1.5	80	M12	50	99

LM = Maximum mouldable length.

Customised stud lengths available for a minimum of 150 pieces.

INOX

Version F189CIN: stainless steel stud (Aisi 303).

Code	Art.	D	H	d	c	m	d3	h3	LM	d1 _{6g}	Q	g
F18932.0010	F18932.TM05X2001CIN	32	23	15	11	11	9	1.5	80	M5	20	15
F18932.0015	F18932.TM05X4001CIN	32	23	15	11	11	9	1.5	80	M5	40	17
F18932.0022	F18932.TM06X1601CIN	32	23	15	11	11	9	1.5	80	M6	16	15
F18932.0026	F18932.TM06X2001CIN	32	23	15	11	11	9	1.5	80	M6	20	16
F18932.0031	F18932.TM06X3001CIN	32	23	15	11	11	9	1.5	80	M6	30	17
F18932.0039	F18932.TM08X1601CIN	32	23	15	11	11	9	1.5	80	M8	16	19
F18932.0042	F18932.TM08X2001CIN	32	23	15	11	11	9	1.5	80	M8	20	21
F18932.0045	F18932.TM08X3001CIN	32	23	15	11	11	9	1.5	80	M8	30	23
F18932.0051	F18932.TM10X2001CIN	32	23	15	11	11	9	1.5	80	M10	20	24
F18940.0005	F18940.TM06X1501CIN	40	24.5	17	12	12.5	12	1	80	M6	15	19,5
F18940.0011	F18940.TM06X2001CIN	40	24.5	17	12	12.5	12	1	80	M6	20	20
F18940.0024	F18940.TM06X4001CIN	40	24.5	17	12	12.5	12	1	80	M6	40	22
F18940.0036	F18940.TM08X1601CIN	40	24.5	17	12	12.5	12	1	80	M8	16	22
F18940.0039	F18940.TM08X2001CIN	40	24.5	17	12	12.5	12	1	80	M8	20	24
F18940.0044	F18940.TM08X3001CIN	40	24.5	17	12	12.5	12	1	80	M8	30	29
F18940.0052	F18940.TM08X4001CIN	40	24.5	17	12	12.5	12	1	80	M8	40	33
F18950.0020	F18950.TM08X3501CIN	50	29	20	14	15	14.5	1.5	80	M8	35	44
F18950.0035	F18950.TM10X2001CIN	50	29	20	14	15	14.5	1.5	80	M10	20	49
F18950.0039	F18950.TM10X3001CIN	50	29	20	14	15	14.5	1.5	80	M10	30	55
F18950.0044	F18950.TM10X4001CIN	50	29	20	14	15	14.5	1.5	80	M10	40	61
F18960.0036	F18960.TM10X5001CIN	60	34	24	15.5	18.5	18	1.5	80	M10	50	72
F18960.0051	F18960.TM12X4001CIN	60	34	24	15.5	18.5	18	1.5	80	M12	40	91
F18960.0056	F18960.TM12X6001CIN	60	34	24	15.5	18.5	18	1.5	80	M12	60	103

LM = Maximum mouldable length.

Customised stud length available for a minimum of 150 pieces.



F189CAT



SOLID STAR HANDWHEEL WITH RETAINING CHAIN AND THREADED STUD

Materials:

Reinforced polyamide.
Resistant to oils and greases.

Surface finish:

Satin.

Colour:

Black (RAL 9011).

Inserts:

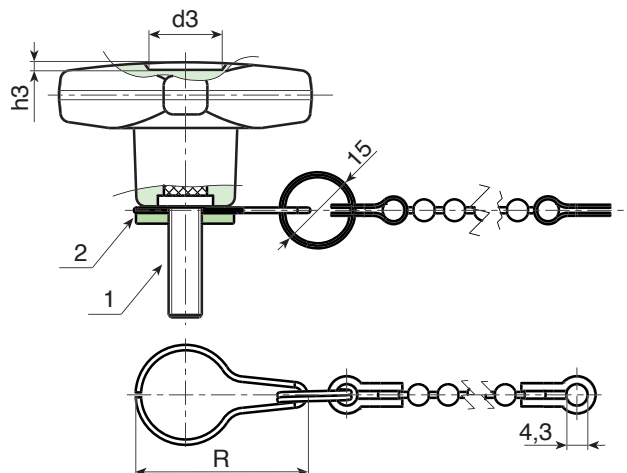
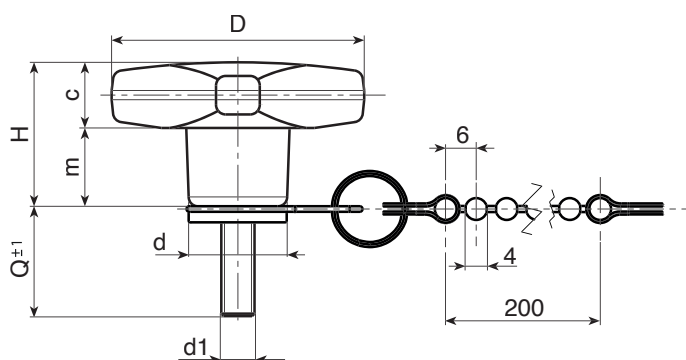
- (1) Galvanised steel threaded stud (thread tolerance 6g).
- (2) Galvanised steel turned ring nut, secured with threadlocker and with groove for retaining hook.

Chain:

Black acetal (POM) chain. Harmonic stainless steel (Aisi 302) joints, retaining ring and hub hook.

Special Requests:

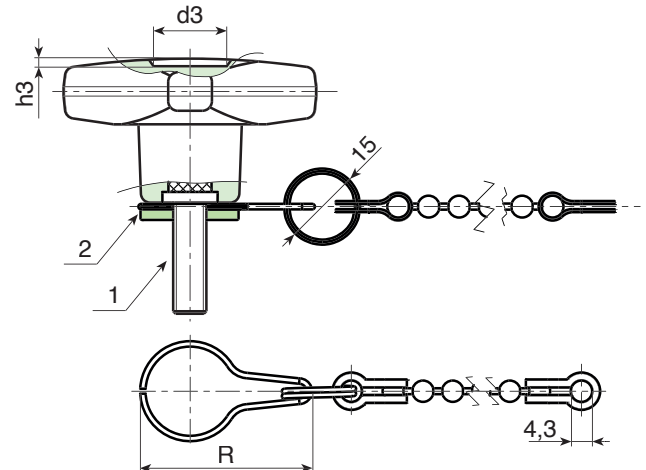
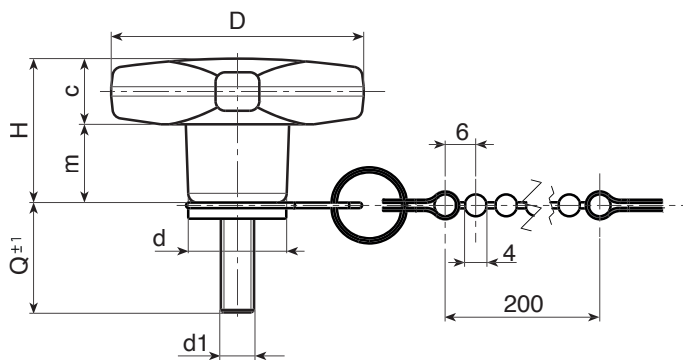
- Upon request and for special quantities inserts can be supplied with customised lengths.
- Upon request the chain can be supplied with customised lengths.
- Upon request and for special quantities inserts can be supplied in different materials.
- Upon request and for special quantities available in the colours indicated in the chart (attention: reduced range) [page].



Code	Art.	D	H	d	R	c	m	d3	h3	LM	d1 _{6g}	Q	g
F18932.0005	F18932.TM05X1601CAT	32	23	15	32	11	11	9	1.5	80	M5	16	17
F18932.0009	F18932.TM05X2001CAT	32	23	15	32	11	11	9	1.5	80	M5	20	18
F18932.0013	F18932.TM05X3001CAT	32	23	15	32	11	11	9	1.5	80	M5	30	19
F18932.0021	F18932.TM06X1601CAT	32	23	15	32	11	11	9	1.5	80	M6	16	18
F18932.0025	F18932.TM06X2001CAT	32	23	15	32	11	11	9	1.5	80	M6	20	19
F18932.0030	F18932.TM06X3001CAT	32	23	15	32	11	11	9	1.5	80	M6	30	21
F18932.0038	F18932.TM08X1601CAT	32	23	15	32	11	11	9	1.5	80	M8	16	22
F18932.0041	F18932.TM08X2001CAT	32	23	15	32	11	11	9	1.5	80	M8	20	24
F18932.0044	F18932.TM08X3001CAT	32	23	15	32	11	11	9	1.5	80	M8	30	26
F18932.0047	F18932.TM08X4001CAT	32	23	15	32	11	11	9	1.5	80	M8	40	28

F189CAT

SOLID STAR HANDWHEEL WITH RETAINING CHAIN AND THREADED STUD



06

Code	Art.	D	H	d	R	c	m	d3	h3	LM	d1 _{6g}	Q	g
F18932.0050	F18932.TM10X2001CAT	32	23	15	32	11	11	9	1.5	80	M10	20	27
F18932.0053	F18932.TM10X3001CAT	32	23	15	32	11	11	9	1.5	80	M10	30	30
F18932.0057	F18932.TM10X4001CAT	32	23	15	32	11	11	9	1.5	80	M10	40	33
F18940.0004	F18940.TM06X1501CAT	40	24.5	17	33	12	12.5	12	1	80	M6	15	23
F18940.0010	F18940.TM06X2001CAT	40	24.5	17	33	12	12.5	12	1	80	M6	20	23
F18940.0017	F18940.TM06X3001CAT	40	24.5	17	33	12	12.5	12	1	80	M6	30	24
F18940.0023	F18940.TM06X4001CAT	40	24.5	17	33	12	12.5	12	1	80	M6	40	25
F18940.0026	F18940.TM06X5001CAT	40	24.5	17	33	12	12.5	12	1	80	M6	50	28
F18940.0035	F18940.TM08X1601CAT	40	24.5	17	33	12	12.5	12	1	80	M8	16	25
F18940.0038	F18940.TM08X2001CAT	40	24.5	17	33	12	12.5	12	1	80	M8	20	27
F18940.0043	F18940.TM08X3001CAT	40	24.5	17	33	12	12.5	12	1	80	M8	30	32
F18940.0051	F18940.TM08X4001CAT	40	24.5	17	33	12	12.5	12	1	80	M8	40	36
F18940.0059	F18940.TM08X5001CAT	40	24.5	17	33	12	12.5	12	1	80	M8	50	40
F18940.0069	F18940.TM10X1501CAT	40	24.5	17	33	12	12.5	12	1	80	M10	15	31
F18940.0071	F18940.TM10X2001CAT	40	24.5	17	33	12	12.5	12	1	80	M10	20	33
F18940.0075	F18940.TM10X3001CAT	40	24.5	17	33	12	12.5	12	1	80	M10	30	38
F18940.0080	F18940.TM10X5001CAT	40	24.5	17	33	12	12.5	12	1	80	M10	50	50
F18950.0011	F18950.TM08X2001CAT	50	29	20	35	14	15	14.5	1.5	80	M8	20	41
F18950.0016	F18950.TM08X3001CAT	50	29	20	35	14	15	14.5	1.5	80	M8	30	45
F18950.0022	F18950.TM08X4001CAT	50	29	20	35	14	15	14.5	1.5	80	M8	40	49
F18950.0034	F18950.TM10X2001CAT	50	29	20	35	14	15	14.5	1.5	80	M10	20	52
F18950.0038	F18950.TM10X3001CAT	50	29	20	35	14	15	14.5	1.5	80	M10	30	58
F18950.0043	F18950.TM10X4001CAT	50	29	20	35	14	15	14.5	1.5	80	M10	40	64
F18950.0046	F18950.TM10X5001CAT	50	29	20	35	14	15	14.5	1.5	80	M10	50	68
F18950.0056	F18950.TM12X3001CAT	50	29	20	35	14	15	14.5	1.5	80	M12	30	60
F18950.0060	F18950.TM12X5001CAT	50	29	20	35	14	15	14.5	1.5	80	M12	50	73
F18960.0009	F18960.TM08X1501CAT	60	34	24	38	15.5	18.5	18	1.5	80	M8	15	49
F18960.0011	F18960.TM08X2001CAT	60	34	24	38	15.5	18.5	18	1.5	80	M8	20	50
F18960.0014	F18960.TM08X3001CAT	60	34	24	38	15.5	18.5	18	1.5	80	M8	30	54
F18960.0017	F18960.TM08X4001CAT	60	34	24	38	15.5	18.5	18	1.5	80	M8	40	57
F18960.0022	F18960.TM10X2001CAT	60	34	24	38	15.5	18.5	18	1.5	80	M10	20	68
F18960.0027	F18960.TM10X3001CAT	60	34	24	38	15.5	18.5	18	1.5	80	M10	30	72
F18960.0031	F18960.TM10X4001CAT	60	34	24	38	15.5	18.5	18	1.5	80	M10	40	76
F18960.0035	F18960.TM10X5001CAT	60	34	24	38	15.5	18.5	18	1.5	80	M10	50	68-72-76
F18960.0042	F18960.TM12X2001CAT	60	34	24	38	15.5	18.5	18	1.5	80	M12	20	53
F18960.0046	F18960.TM12X3001CAT	60	34	24	38	15.5	18.5	18	1.5	80	M12	30	90
F18960.0050	F18960.TM12X4001CAT	60	34	24	38	15.5	18.5	18	1.5	80	M12	40	96
F18960.0053	F18960.TM12X5001CAT	60	34	24	38	15.5	18.5	18	1.5	80	M12	50	104

LM = Maximum mouldable length.
Customised stud length available for a minimum of 150 pieces.



F200

UPDATE



PF

UL94
HB



SOLID BAKELITE LOBED KNOB WITH FEMALE THREADED INSERT

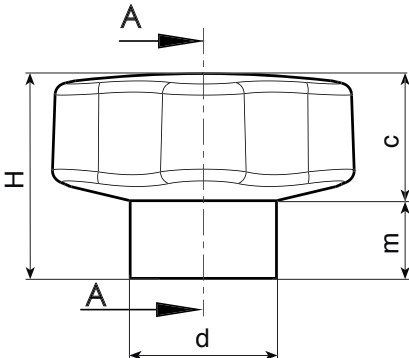
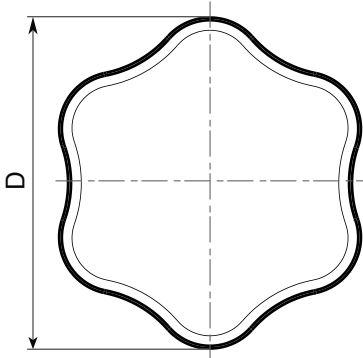
Materials:
Phenolic resin.
Resistant to oils and greases.
Resistant to high temperatures.

Surface finish:
Glossy.

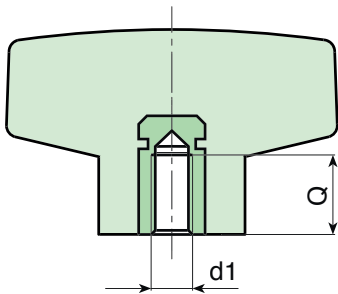
Colour:
Black (RAL 9011).

Inserts:
Brass insert with female threaded hole (thread tolerance 6H).

Special requests:
• None.



SEZ. A-A



Code	art.	D	d	H	m	c	d1 _{6H}	Q	g
F20025.0001	F20025.BM0401	25	15	20	9	11	M4	7,5	0
F20030.0001	F20030.BM0501	30	17	25	11	14	M5	10	0
F20040.0002	F20040.BM0601	40	21	30	13	17	M6	10	0
F20040.0003	F20040.BM0801	40	21	30	13	17	M8	13,5	0
F20050.0002	F20050.BM0801	50	23	33	13	20	M8	15	0
F20050.0003	F20050.BM1001	50	23	33	13	20	M10	15	0
F20060.0003	F20060.BM1001	60	28	37	15	22	M10	15	0
F20060.0004	F20060.BM1201	60	28	37	15	22	M12	18	0

SOLID BAKELITE LOBED KNOB WITH THREADED STUD

Materials:

Phenolic resin.

Resistant to oils and greases.

Resistant to high temperatures.

Surface finish:

Glossy.

Colour:

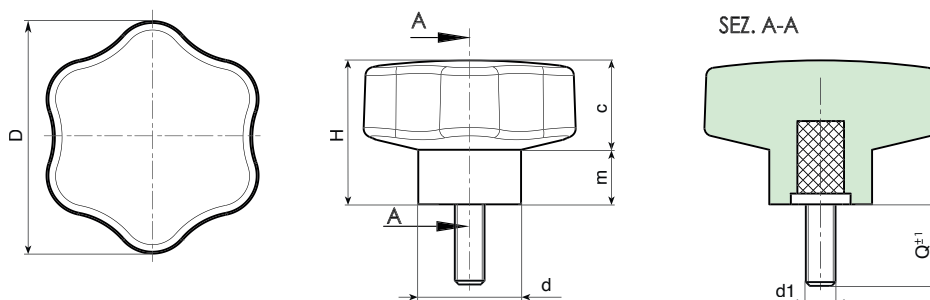
Black (RAL 9011).

Inserts:

Galvanised steel threaded stud (thread tolerance 6g)

Special requests:

- None.



Code	art.	D	d	H	m	c	LM	d1 _{6g}	Q
F20230.0002	F20230.BM05X2001	30	17	25	11	14	60	M5	20
F20230.0003	F20230.BM05X3001	30	17	25	11	14	60	M5	30
F20230.0004	F20230.BM05X4001	30	17	25	11	14	60	M5	40
F20230.0005	F20230.BM05X5001	30	17	25	11	14	60	M5	50
F20230.0006	F20230.BM05X6001	30	17	25	11	14	60	M5	60
F20240.0002	F20240.BM06X2001	40	21	28	13	15	60	M6	20
F20240.0003	F20240.BM06X3001	40	21	28	13	15	60	M6	30
F20240.0004	F20240.BM06X4001	40	21	28	13	15	60	M6	40
F20240.0005	F20240.BM06X5001	40	21	28	13	15	60	M6	50
F20240.0006	F20240.BM06X6001	40	21	28	13	15	60	M6	60
F20240.0008	F20240.BM08X2001	40	21	28	13	15	60	M8	20
F20240.0009	F20240.BM08X3001	40	21	28	13	15	60	M8	30
F20240.0010	F20240.BM08X4001	40	21	28	13	15	60	M8	40
F20240.0011	F20240.BM08X5001	40	21	28	13	15	60	M8	50
F20240.0012	F20240.BM08X6001	40	21	28	13	15	60	M8	60
F20250.0008	F20250.BM08X2001	50	23	34	12	22	60	M8	20
F20250.0009	F20250.BM08X3001	50	23	34	12	22	60	M8	30
F20250.0010	F20250.BM08X4001	50	23	34	12	22	60	M8	40
F20250.0011	F20250.BM08X5001	50	23	34	12	22	60	M8	50
F20250.0012	F20250.BM08X6001	50	23	34	12	22	60	M8	60
F20250.0013	F20250.BM10X2001	50	23	34	12	22	60	M10	20
F20250.0014	F20250.BM10X3001	50	23	34	12	22	60	M10	30
F20250.0015	F20250.BM10X4001	50	23	34	12	22	60	M10	40
F20250.0016	F20250.BM10X5001	50	23	34	12	22	60	M10	50
F20250.0017	F20250.BM10X6001	50	23	34	12	22	60	M10	60
F20260.0008	F20260.BM10X2001	60,5	28	40	15	25	60	M10	20
F20260.0009	F20260.BM10X3001	60,5	28	40	15	25	60	M10	30
F20260.0010	F20260.BM10X4001	60,5	28	40	15	25	60	M10	40
F20260.0011	F20260.BM10X5001	60,5	28	40	15	25	60	M10	50
F20260.0012	F20260.BM10X6001	60,5	28	40	15	25	60	M10	60
F20260.0014	F20260.BM12X2001	60,5	28	40	15	25	60	M12	20
F20260.0015	F20260.BM12X3001	60,5	28	40	15	25	60	M12	30
F20260.0016	F20260.BM12X4001	60,5	28	40	15	25	60	M12	40
F20260.0017	F20260.BM12X5001	60,5	28	40	15	25	60	M12	50
F20260.0018	F20260.BM12X6001	60,5	28	40	15	25	60	M12	60

LM = maximum mouldable length.

F204

UPDATE

+170°
-20°

PF

UL94
HB

RoHS
COMPLIANT

SOLID BAKELITE LOBED KNOB WITH INSERT AND THREADED THROUGH HOLE

Materials:

Phenolic resin.
Resistant to oils and greases.
Resistant to high temperatures.

Surface finish:

Glossy.

Colour:

Black (RAL 9011).

Inserts:

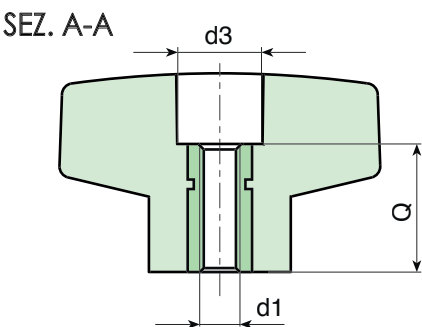
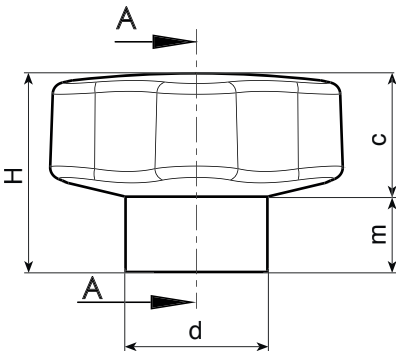
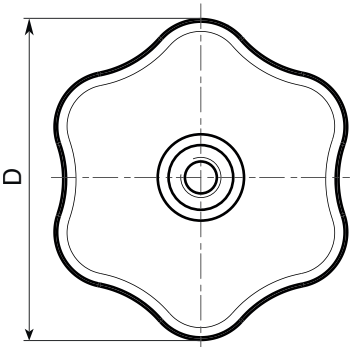
Brass insert with threaded through hole (thread tolerance 6H).

Special requests:

- None.



06



Code	art.	D	d	H	m	c	d3	d1 _{6H}	Q	
F20440.0002	F20440.BM0801	40	21	30	13	17	13	M8	17	26
F20440.0003	F20440.BM1001	40	21	30	13	17	13	M10	17	24
F20460.0003	F20460.BM1201	60	28	37	15	22	15	M12	26	85

F210



PF

UL94
HB



SOLID BAKELITE CROSS KNOB WITH FEMALE THREADED INSERT

Materials:

Phenolic resin.

Resistant to oils and greases.

Resistant to high temperatures.

Surface finish:

Glossy.

Colour:

Black (RAL 9011).

Inserts:

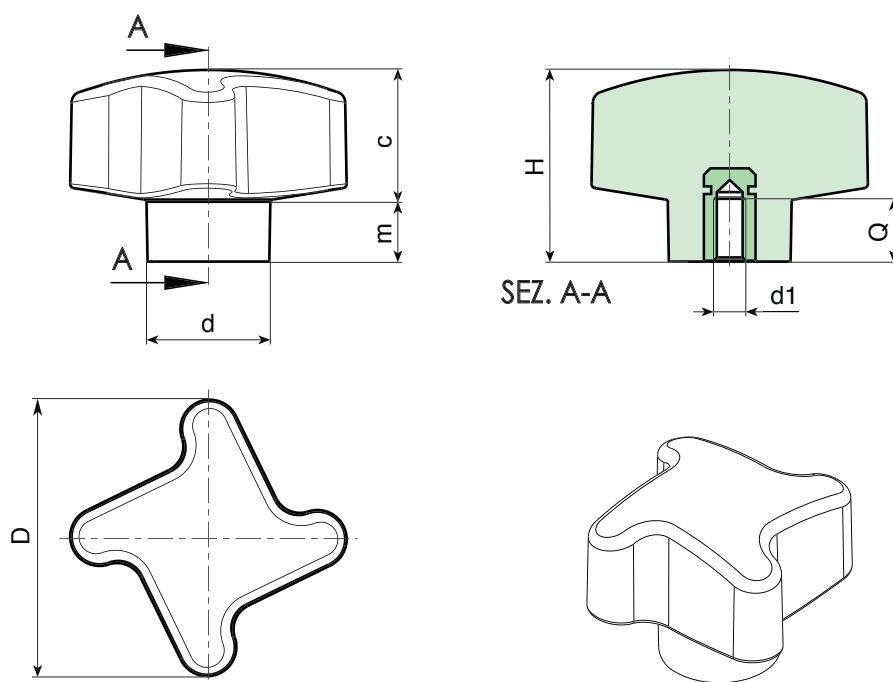
Brass insert with female threaded hole (thread tolerance 6H).

Special requests:

- None.



06



Code	art.	D	d	H	m	c	d1 _{6H}	Q	g
F21030.0001	F21030.BM0601	30	16	22	5,5	16,5	M6	10	0
F21040.0001	F21040.BM0601	40	21	26	5	21	M6	10	0
F21040.0002	F21040.BM0801	40	21	26	5	21	M8	13.5	28
F21040.0003	F21040.BM1001	40	21	26	5	21	M10	15	-
F21050.0001	F21050.BM0801	50	23	31	7	24	M8	15	-
F21050.0002	F21050.BM1001	50	23	31	7	24	M10	15	-
F21050.0003	F21050.BM1201	50	23	31	7	24	M12	18	-

F269

HIGH CLAMPING STAR HANDWHEEL WITH THREADED INSERT



Materials:

Reinforced polyamide.
Resistant to oils and greases.

Surface finish:

Satin.

Colour:

Black (RAL 9011).

Inserts:

Nickel-plated brass insert with female threaded hole (thread tolerance 6H).

Special Requests:

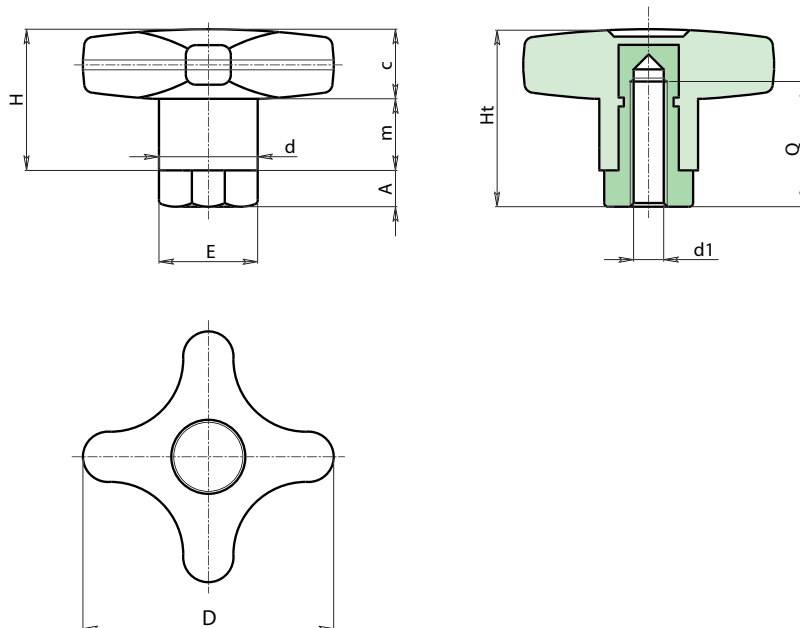
- Upon request and for special quantities available in the colours indicated in the chart (attention: reduced range) [page].

ATTENTION:

For a standard lock turn the knob. For a tighter lock, use a hex wrench to tighten the hex nut.



06



Code	Art.	D	d	H	Ht	A	E	m	c	d1 _{6H}	Q	g
F26950.0001	F26950.TM0601	50	18	29	39	10	17	15	14	M6	25	72
F26950.0002	F26950.TM0801	50	18	29	39	10	17	15	14	M8	25	67
F26950.0003	F26950.TM1001	50	18	29	39	10	17	15	14	M10	25	60

F270

HIGH CLAMPING STAR HANDWHEEL WITH THREADED STUD

+135°
-30°

PA6
+G.F.

UL94
HB

RoHS
COMPLIANT

Materials:
Reinforced polyamide.
Resistant to oils and greases.

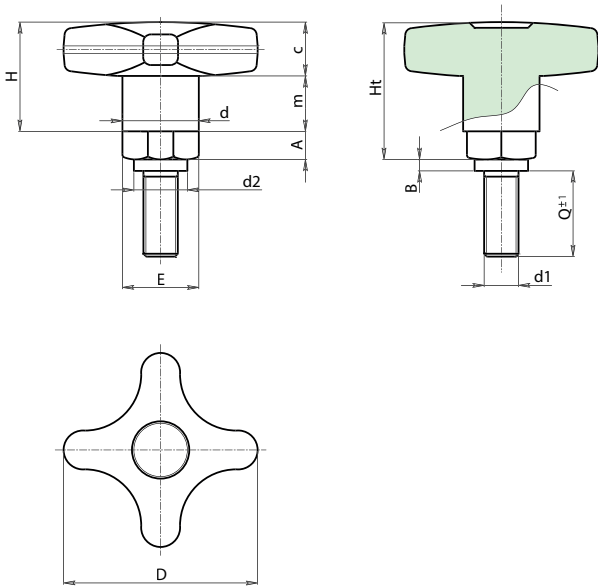
Surface finish:
Satin.

Colour:
Black (RAL 9011).

Inserts:
Nickel-plated brass insert with threaded stud (thread tolerance 6g).

- Special Requests:**
- Upon request and for special quantities inserts can be supplied with customised lengths.
 - Upon request and for special quantities available in the colours indicated in the chart (attention: reduced range) [page].

ATTENTION:
For a standard lock turn the knob. For a tighter lock, use a hex wrench to tighten the hex nut.



Code	Art.	D	d	d2	H	Ht	A	B	E	m	c	d1 _{6g}	Q	g
F27050.0001	F27050.TM10X2501	50	18	15	24	34	10	4	17	15	14	M10	25	97

F271

QUICK RELEASE STAR HANDWHEEL WITH STEEL HUB AND THREADED HOLE

Materials:

Reinforced polyamide.
Resistant to oils and greases.

Surface finish:

Satin.

Colour:

Black (RAL 9011).

Inserts:

F271:
Galvanised steel insert with threaded through hole, with groove for quick release.

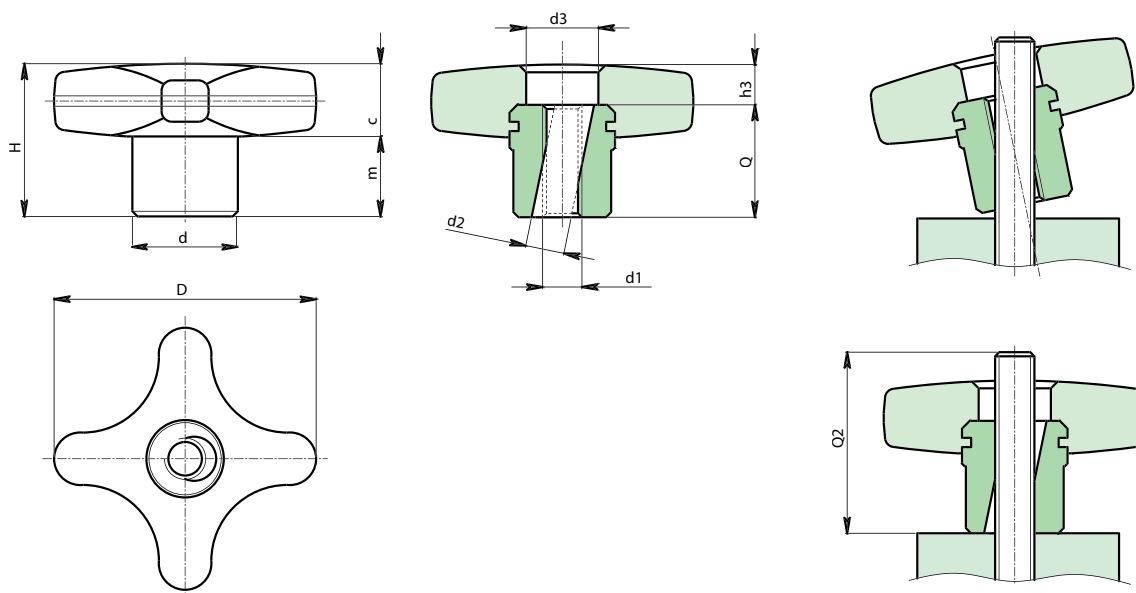
F271CIN:
Stainless steel insert (Aisi 303) with threaded through hole, with groove for quick release.

Special Requests:

- None.

ATTENTION:

TO GUARANTEE CORRECT OPERATION OF THE QUICK RELEASE HANDWHEEL, THE THREADED STUD MUST HAVE A MINIMUM LENGTH EQUAL TO Q2.



Version F271: Galvanised steel hub.

Code	Art.	D	d	d2	d3	H	h3	m	c	d1	Q	Q2	g
F27140.0001	F27140.TM0801P	40	16	8.5	14	26	4	14	12	M8	22	35	31
F27150.0001	F27150.TM1001P	50	20	10.5	18	34	4	20	14	M10	30	43	63

Version F271 PIN: Stainless steel hub (Aisi 303).

Code	Art.	D	d	d2	d3	H	h3	m	c	d1	Q	Q2	g
F27140.0002	F27140.TM0801PIN	40	16	8.5	14	26	4	14	12	M8	22	35	31
F27150.0002	F27150.TM1001PIN	50	20	10.5	18	34	4	20	14	M10	30	43	63

INOX

F275

6-LOBE HANDWHEEL WITH STEEL HUB AND THREADED HOLE



Materials:

Reinforced polyamide.
Resistant to oils and greases.

Surface finish:

Satin.

Colour:

Black (RAL 9011).

Inserts:

F275:

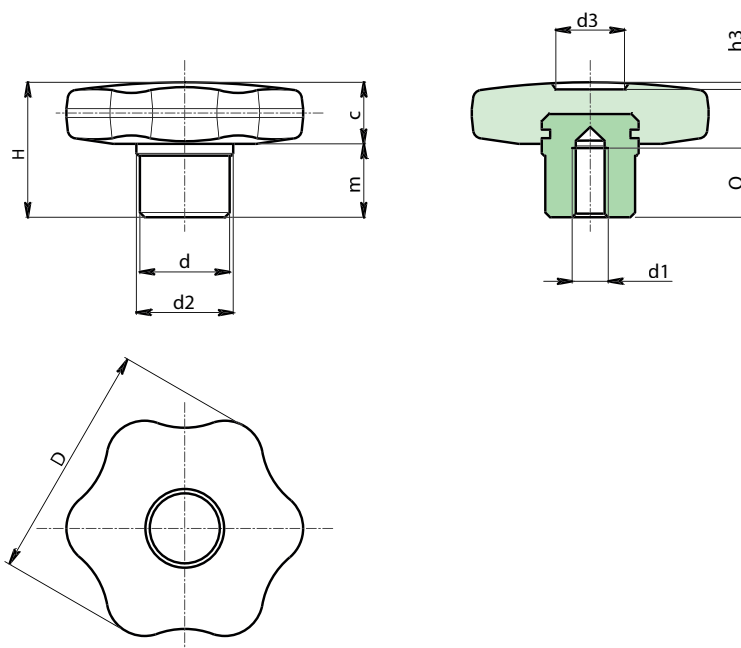
Galvanised steel insert with female threaded hole (thread tolerance 6H).

F275CIN:

Stainless steel insert with female threaded hole (Aisi 303) (thread tolerance 6H).

Special Requests:

- Upon request and for special quantities inserts can be supplied with custom hole diameter d1.
- Upon request and for special quantities available in the colours indicated in the chart (attention: reduced range) [page].



Version F275: Galvanised steel hub.

Code	Art.	D	d	d2	H	m	c	d1 _{6H}	Q	g
F27530.0001	F27530.TM0601	30	13	15	22	11	11	M6	12	25
F27540.0001	F27540.TM0801	40	15	17	24	12	12	M8	14	39
F27550.0002	F27550.TM1001	50	18	20	29	15	14	M10	16	66
F27560.0001	F27560.TM1201	60	20	24	34	18	16	M12	20	105

Version F275 CIN: Stainless steel hub (Aisi 303).

INOX

Code	Art.	D	d	d2	H	m	c	d1 _{6H}	Q	g
F27530.0002	F27530.TM0601CIN	30	13	15	22	11	11	M6	12	25
F27540.0002	F27540.TM0801CIN	40	15	17	24	12	12	M8	14	39
F27550.0003	F27550.TM1001CIN	50	18	20	29	15	14	M10	16	66
F27560.0002	F27560.TM1201CIN	60	20	24	34	18	16	M12	20	105

F276

6-LOBE HANDWHEEL WITH STEEL HUB AND SMOOTH BORE



Materials:

Reinforced polyamide.
Resistant to oils and greases.

Surface finish:

Satin.

Colour:

Black (RAL 9011).

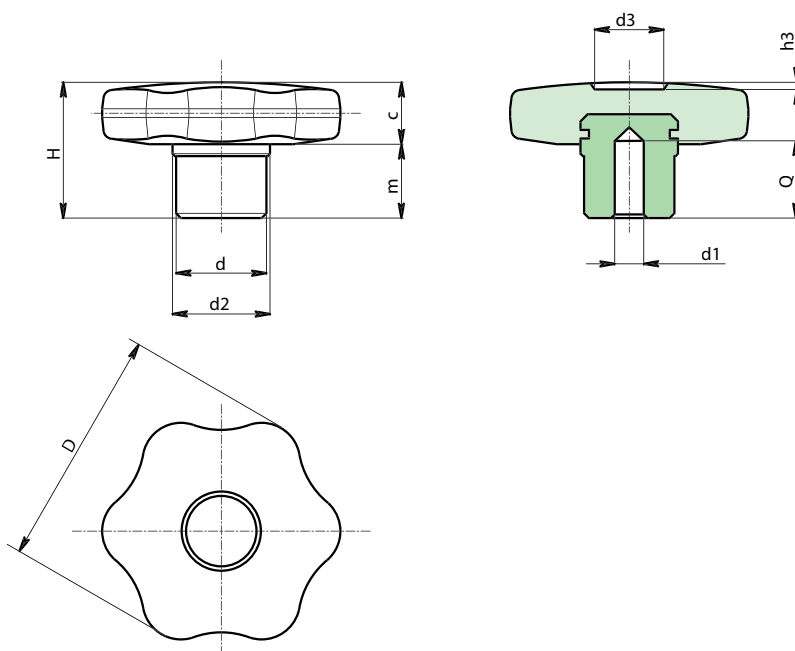
Inserts:

F276:
Galvanised steel insert with blind smooth bore (bore tolerance H10).

F276CIN:
Galvanised steel insert with blind smooth bore (Aisi 303) (bore tolerance H7).

Special requests:

- Upon request and for special quantities inserts can be supplied with custom hole diameter d1.
- Upon request and for special quantities available in the colours indicated in the chart (attention: reduced range) [page].



Version F276: Galvanised steel hub.

Code	Art.	D	d	d2	H	m	c	d1 _{H10}	Q	g
F27630.0002	F27630.TD0601	30	13	15	22	11	11	6	12	26
F27640.0001	F27640.TD0801	40	15	17	24	12	12	8	14	40
F27650.0001	F27650.TD1001	50	18	20	29	15	14	10	16	67
F27660.0001	F27660.TD1201	60	20	24	34	18	16	12	20	102

Version F276 CIN: Stainless steel hub (Aisi 303).

INOX

Code	Art.	D	d	d2	H	m	c	d1 _{H7}	Q	g
F27630.0003	F27630.TD0601CIN	30	13	15	22	11	11	6	12	26
F27640.0002	F27640.TD0801CIN	40	15	17	24	12	12	8	14	40
F27650.0002	F27650.TD1001CIN	50	18	20	29	15	14	10	16	67
F27660.0002	F27660.TD1201CIN	60	20	24	34	18	16	12	20	102

F277



6-LOBE HANDWHEEL WITH STEEL HUB AND THREADED THROUGH HOLE

Materials:

Reinforced polyamide.
Resistant to oils and greases.

Surface finish:

Satin.

Colour:

Black (RAL 9011).

Inserts:

F277:

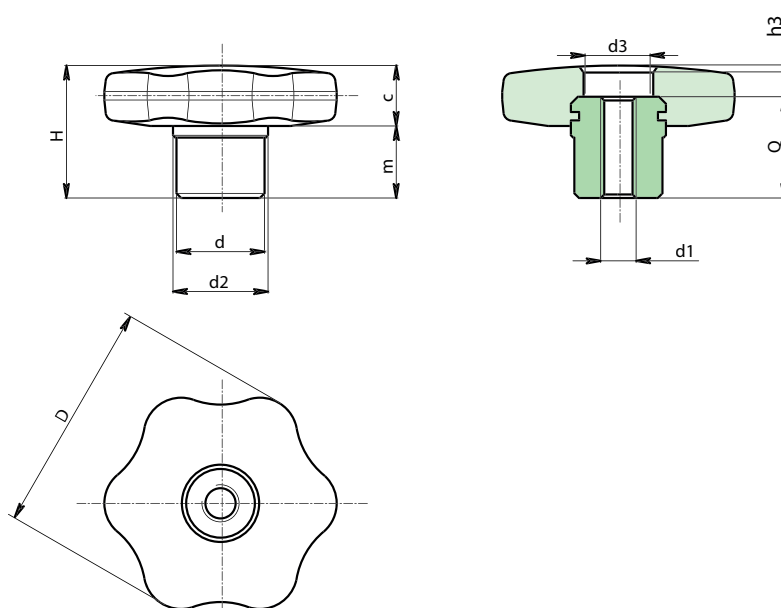
Galvanised steel insert with threaded through hole (thread tolerance 6H).

F277CIN:

Stainless steel insert with threaded through hole (Aisi 303) (thread tolerance 6H).

Special requests:

- Upon request and for special quantities inserts can be supplied with custom hole diameter d1.
- Upon request and for special quantities available in the colours indicated in the chart (attention: reduced range) [page].



Version F277: Galvanised steel hub.

Code	Art.	D	d	d2	d3	H	h3	m	c	d1 _{6H}	Q	g
F27730.0001	F27730.TM0601	30	13	15	8	22	4	11	11	M6	18	24
F27740.0001	F27740.TM0801	40	15	17	11	24	6	12	12	M8	18	34
F27750.0001	F27750.TM1001	50	18	20	13	29	7	15	14	M10	22	59
F27760.0001	F27760.TM1201	60	20	24	16	34	6	18	16	M12	28	98

Version F277CIN: Stainless steel hub (Aisi 303).

INOX

Code	Art.	D	d	d2	d3	H	h3	m	c	d1 _{6H}	Q	g
F27730.0002	F27730.TM0601PIN	30	13	15	8	22	4	11	11	M6	18	24
F27740.0002	F27740.TM0801PIN	40	15	17	11	24	6	12	12	M8	18	34
F27750.0002	F27750.TM1001PIN	50	18	20	13	29	7	15	14	M10	22	59
F27760.0002	F27760.TM1201PIN	60	20	24	16	34	6	18	16	M12	28	98

F278

6-LOBE HANDWHEEL WITH STEEL HUB AND THREADED STUD



Materials:

Reinforced polyamide.
Resistant to oils and greases.

Surface finish:

Satin.

Colour:

Black (RAL 9011).

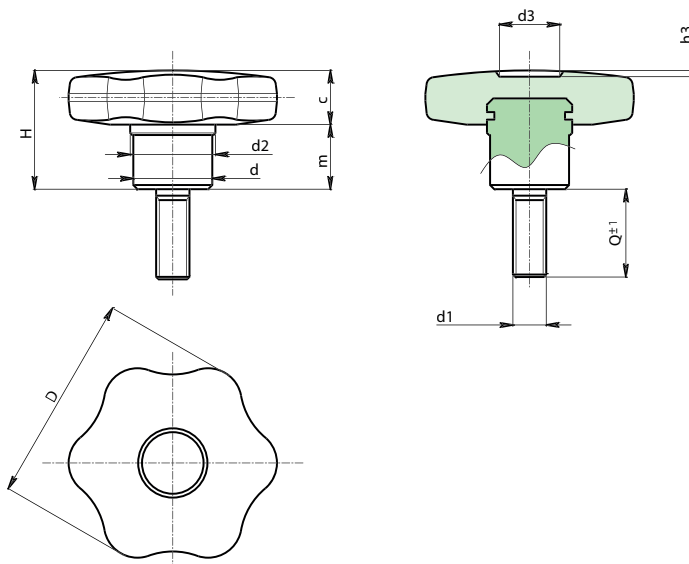
Inserts:

F278:
Galvanised steel insert with threaded stud (thread tolerance 6g).

F278CIN:
Stainless steel insert with threaded stud (Aisi 303) (thread tolerance 6g).

Special requests:

- Upon request and for special quantities inserts can be supplied with customised lengths.
- Upon request and for special quantities available in the colours indicated in the chart (attention: reduced range) [page].



Version F278: Galvanised steel hub.

Code	Art.	D	d	d2	d3	H	h3	m	c	d1 _{6g}	Q	LM	g
F27840.0002	F27840.TM08X3001	40	15	17	11	24	6	12	12	M8	30	55	54
F27850.0002	F27850.TM10X4001	50	18	20	13	29	7	15	14	M10	40	60	96
F27860.0001	F27860.TM12X4001	60	20	24	16	34	6	18	16	M12	40	60	-

LM = Maximum mouldable length.

Customised stud lengths available for a minimum of 150 pieces.

Version F278 CIN: Stainless steel hub (Aisi 303).

INOX

Code	Art.	D	d	d2	d3	H	h3	m	c	d1 _{6g}	Q	LM	g
F27840.0003	F27840.TM08X3001CIN	40	15	17	11	24	6	12	12	M8	30	45	54
F27850.0003	F27850.TM10X4001CIN	50	18	20	13	29	7	15	14	M10	40	50	-
F27860.0002	F27860.TM12X4001CIN	60	20	24	16	34	6	18	16	M12	40	50	-

Customised stud lengths available for a minimum of 150 pieces.

LM = Maximum mouldable length.



F286

STAR HANDWHEEL WITH STEEL HUB AND THREADED HOLE



Materials:

Reinforced polyamide.
Resistant to oils and greases.

Surface finish:

Satin.

Colour:

Black (RAL 9011).

Inserts:

F286:

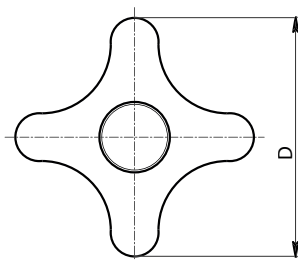
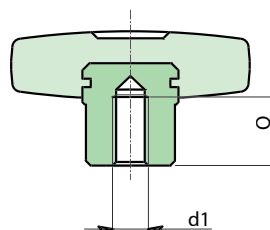
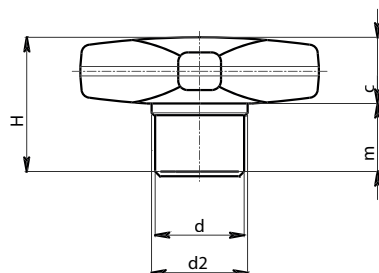
Galvanised steel insert with female threaded hole (thread tolerance 6H).

F286CIN:

Stainless steel insert with female threaded hole (Aisi 303) (thread tolerance 6H).

Special requests:

- Upon request and for special quantities inserts can be supplied with custom hole diameter d1.
- Upon request and for special quantities available in the colours indicated in the chart on page .



Version F286: Galvanised steel hub.

Code	Art.	D	d	d2	H	m	c	d1 _{6H}	Q	g
F28632.0002	F28632.TM0601	32	13	15	22	11	11	M6	12	23
F28640.0001	F28640.TM0801	40	14	16	24	12	12	M8	14	32
F28650.0001	F28650.TM1001	50	18	20	29	15	14	M10	16	54
F28660.0001	F28660.TM1201	60	20	24	34	18	16	M12	20	90

Version F286 CIN: Stainless steel hub (Aisi 303).

INOX

Code	Art.	D	d	d2	H	m	c	d1 _{6H}	Q	g
F28632.0001	F28632.TM0601CIN	32	13	15	22	11	11	M6	12	23
F28640.0002	F28640.TM0801CIN	40	14	16	24	12	12	M8	14	32
F28650.0002	F28650.TM1001CIN	50	18	20	29	15	14	M10	16	54
F28660.0002	F28660.TM1201CIN	60	20	24	34	18	16	M12	20	90

F287

STAR HANDWHEEL WITH STEEL HUB AND SMOOTH BORE



Materials:

Reinforced polyamide.
Resistant to oils and greases.

Surface finish:

Satin.

Colour:

Black (RAL 9011).

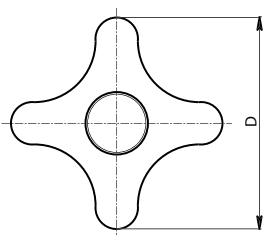
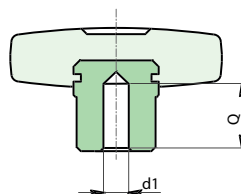
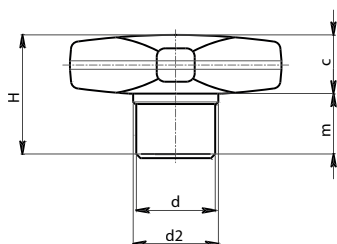
Inserts:

F287:
Galvanised steel insert with blind smooth bore (bore tolerance H9).

F287CIN:
Galvanised steel insert with blind smooth bore (Aisi 303) (bore tolerance H9).

Special requests:

- Upon request and for special quantities inserts can be supplied with custom hole diameter d1.
- Upon request and for special quantities available in the colours indicated in the chart (attention: reduced range) [page].



Version F287: Galvanised steel hub.

Code	Art.	D	d	d2	H	m	c	d1 _{H9}	Q	g
F28732.0002	F28732.TD0601	32	13	15	22	11	11	6	12	24
F28740.0001	F28740.TD0801	40	14	16	24	12	12	8	14	35
F28750.0001	F28750.TD1001	50	18	20	29	15	14	10	16	57
F28760.0002	F28760.TD1201	60	20	24	34	18	16	12	20	85

Version F287 CIN: Stainless steel hub (Aisi 303).

INOX

Code	Art.	D	d	d2	H	m	c	d1 _{H9}	Q	g
F28732.0001	F28732.TD0601CIN	32	13	15	22	11	11	6	12	24
F28740.0002	F28740.TD0801CIN	40	14	16	24	12	12	8	14	35
F28750.0002	F28750.TD1001CIN	50	18	20	29	15	14	10	16	57
F28760.0001	F28760.TD1201CIN	60	20	24	34	18	16	12	20	85



F288



STAR HANDWHEEL WITH STEEL HUB AND THREADED THROUGH HOLE

Materials:

Reinforced polyamide.
Resistant to oils and greases.

Surface finish:

Satin.

Colour:

Black (RAL 9011).

Inserts:

F288:

Galvanised steel insert with threaded through hole (thread tolerance 6H).

F288PIN:

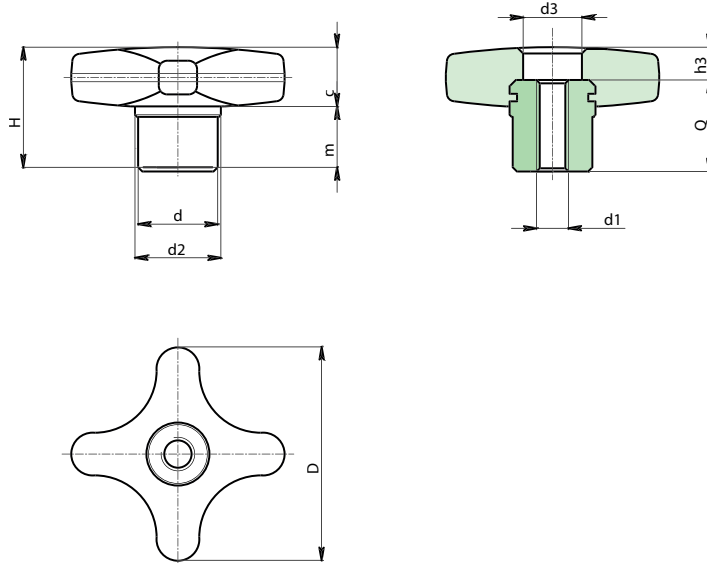
Stainless steel insert with threaded through hole (Aisi 303) (thread tolerance 6H).

Special requests:

- Upon request and for special quantities inserts can be supplied with custom hole diameter d1.
- Upon request and for special quantities available in the colours indicated in the chart (attention: reduced range) [page].



06



Version F288: Galvanised steel hub.

Code	Art.	D	d	d2	d3	H	h3	m	c	d1 _{6H}	Q	g
F28832.0001	F28832.TM0601	32	13	15	8	22	4	11	11	M6	18	21
F28840.0001	F28840.TM0801	40	14	16	11	24	6	12	12	M8	18	28
F28850.0001	F28850.TM1001	50	18	20	14	29	7	15	14	M10	22	49
F28860.0001	F28860.TM1201	60	20	24	16	34	6	18	16	M12	28	81

Version F288 PIN: Stainless steel hub (Aisi 303).

INOX

Code	Art.	D	d	d2	d3	H	h3	m	c	d1 _{6H}	Q	g
F28832.0002	F28832.TM0601PIN	32	13	15	8	22	4	11	11	M6	18	21
F28840.0002	F28840.TM0801PIN	40	14	16	11	24	6	12	12	M8	18	28
F28850.0002	F28850.TM1001PIN	50	18	20	14	29	7	15	14	M10	22	49
F28860.0002	F28860.TM1201PIN	60	20	24	16	34	6	18	16	M12	28	81



F289

STAR HANDWHEEL WITH STEEL HUB AND THREADED STUD



Materials:

Reinforced polyamide.
Resistant to oils and greases.

Surface finish:

Satin.

Colour:

Black (RAL 9011).

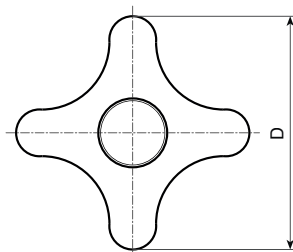
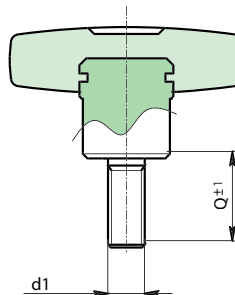
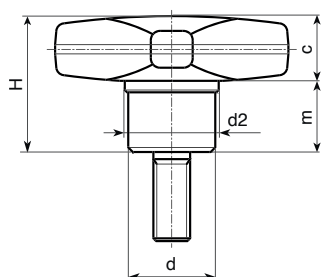
Inserts:

F289:
Galvanised steel insert with threaded stud (thread tolerance 6g).

F289CIN:
Stainless steel insert with threaded stud (Aisi 303) (thread tolerance 6g).

Special requests:

- Upon request and for special quantities inserts can be supplied with customised lengths.
- Upon request and for special quantities available in the colours indicated in the chart (attention: reduced range) [page].



Version F289: Galvanised steel hub.

Code	Art.	D	d	d2	H	m	c	d1 _{6g}	Q	LM	g
-	F28940.TM08X2001	40	14	16	24	12	12	M8	20	55	38
-	F28950.TM10X4001	50	18	20	29	15	14	M10	A.R.	60	60
-	F28960.TM12X2501	60	20	24	34	18	16	M12	25	60	97

Customised stud lengths available for a minimum of 150 pieces.

LM = Maximum mouldable length.

Version F289 CIN: Stainless steel hub (Aisi 303).

INOX

Code	Art.	D	d	d2	H	m	c	d1 _{6g}	Q	LM	g
-	F28940.TM08X2001CIN	40	14	16	24	12	12	M8	20	55	38
-	F28950.TM10X4001CIN	50	18	20	29	15	14	M10	40	60	60
-	F28960.TM12X2501CIN	60	20	24	34	18	16	M12	25	60	97

Customised stud lengths available for a minimum of 150 pieces.

LM = Maximum mouldable length.



F661

3-LOBE SOLID HANDWHEEL WITH FEMALE THREADED INSERT



Materials:

Reinforced polyamide.
Resistant to oils and greases.

Surface finish:

Satin.

Colour:

Black (RAL 9011).

Inserts:

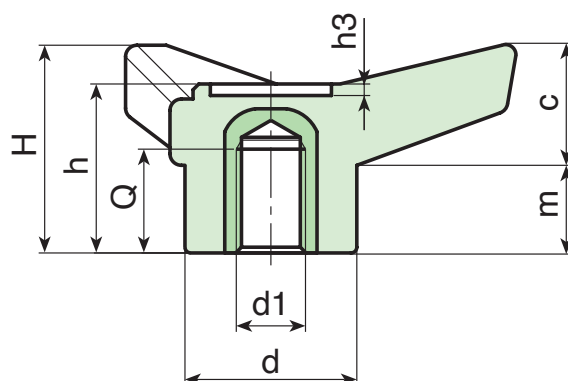
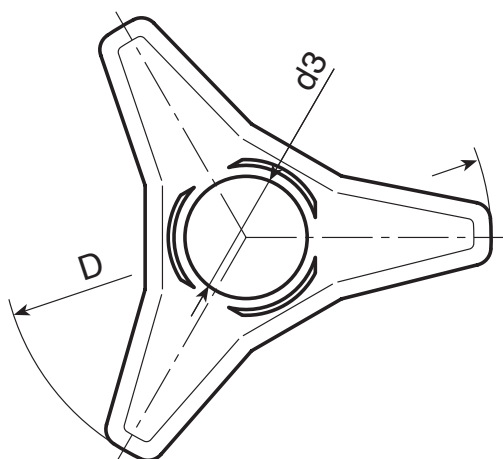
Brass insert with female threaded hole (thread tolerance 6H).
(*) Galvanised steel insert with female threaded hole (thread tolerance 6H).

Hub:

Solid Hub

Special requests:

- Upon request and for special quantities inserts can be supplied in different materials.
- Upon request and for special quantities available in the colours indicated in the chart (attention: reduced range) [page].



Code	art.	D	H	h	d	c	m	d3	h3	d1 _{6H}	Q	g
F661045.0002	F661045.TM0601	45	21	18	16	11	10	11	1	M6	9	10
F661045.0003	F661045.TM0801	45	21	18	16	11	10	11	1	M8	11	14
F661045.0004	F661045.TM1001	45	21	18	16	11	10	11	1	M10	10	15
F661065.0001	F661065.TM0801	65	28	23.5	22	16.5	11.5	15.5	1.5	M8	11	28
F661065.0004	F661065.TM1001	65	28	23.5	22	16.5	11.5	15.5	1.5	M10	11	29
F661065.0006	F661065.TM1201	65	28	23.5	22	16.5	11.5	15.5	1.5	M12	13	31
F661085.0002	F661085.TM0801	85	37	30.5	30	21	16	21	2	M8	15	53
F661085.0003	F661085.TM1001	85	37	30.5	30	21	16	21	2	M10	14	55
F661085.0004	F661085.TM1201	85	37	30.5	30	21	16	21	2	M12	19	60
F661105.0001	F661105.TM0801	105	46	37.5	35	26	19	25	2	M8	15	89
F661105.0002	F661105.TM1001	105	46	37.5	35	26	19	25	2	M10	17	90
F661105.0004	F661105.TM1201	105	46	37.5	35	26	19	25	2	M12	17	97
F661105.0005	F661105.TM1401	105	46	37.5	35	26	19	25	2	M14	19	98
F661125.0001	F661125.TM1201	125	54	44	42.5	31	23	28.5	2	M12	18	160
F661125.0002	F661125.TM1401	125	54	44	42.5	31	23	28.5	2	M14	18	165
F661125.0003	F661125.TM1601	125	54	44	42.5	31	23	28.5	2	(*)M16	21	177
F661125.0005	F661125.TM1801	125	54	44	42.5	31	23	28.5	2	(*)M18	21	182

F662

3-LOBE SOLID HANDWHEEL WITH INSERT AND SMOOTH BORE



Materials:

Reinforced polyamide.
Resistant to oils and greases.

Surface finish:

Satin.

Colour:

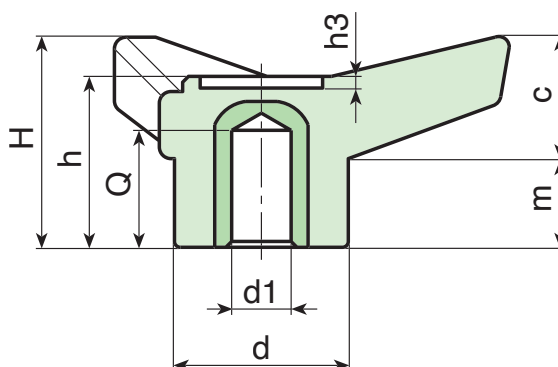
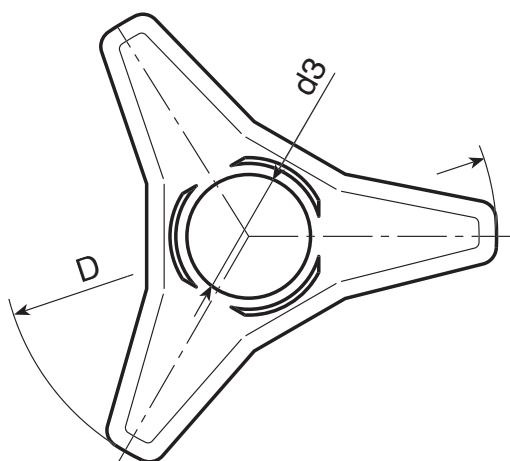
Black (RAL 9011).

Inserts:

Galvanised steel insert with blind smooth bore (bore tolerance H10).

Special Requests:

- Upon request and for special quantities inserts can be supplied with custom hole diameter d1.
- Upon request and for special quantities inserts can be supplied in different materials.
- Upon request and for special quantities available in the colours indicated in the chart (attention: reduced range) [page].



Code	Art.	D	H	h	d	c	m	d3	h3	dm	d1 _{H10}	Q	g
F662045.0001	F662045.TD0601	45	21	18	16	11	10	11	1	-	6	8	14
F662065.0004	F662065.TD0501	65	28	23.5	22	16.5	11.5	15.5	1.5	10	5	13	36
F662065.0003	F662065.TD1001	65	28	23.5	22	16.5	11.5	15.5	1.5	10	10	13	34
F662085.0001	F662085.TD0501	85	37	30.5	30	21	16	21	2	16	5	19	112
F662085.0004	F662085.TD1001	85	37	30.5	30	21	16	21	2	16	10	19	110
F662085.0005	F662085.TD1201	85	37	30.5	30	21	16	21	2	16	12	19	110
F662085.0006	F662085.TD1401	85	37	30.5	30	21	16	21	2	16	14	19	110
F662105.0001	F662105.TD0501	105	46	37.5	35	26	19	25	2	18	5	24	126
F662105.0005	F662105.TD1201	105	46	37.5	35	26	19	25	2	18	12	24	98
F662105.0006	F662105.TD1401	105	46	37.5	35	26	19	25	2	18	14	24	95
F662105.0008	F662105.TD1601	105	46	37.5	35	26	19	25	2	18	16	24	163
F662125.0001	F662125.TD0801	125	54	45	42.5	31	23	28	2	22	8	26	290

Attention: for a minimum of 50 pieces the diameter d1 can be produced with the requested dimensions with H10 tolerance.
Dm = Maximum obtainable diameter for subsequent machining (widening).



F663



3-LOBE SOLID HANDWHEEL WITH THREADED THROUGH-HOLE INSERT

Materials:

Reinforced polyamide. Resistant to oils and greases.

Surface finish:

Satin.

Colour:

Black (RAL 9011).

Inserts:

Brass insert with threaded through hole (thread tolerance 6H).

(*) Galvanised steel insert with threaded through hole (thread tolerance 6H).

Hub:

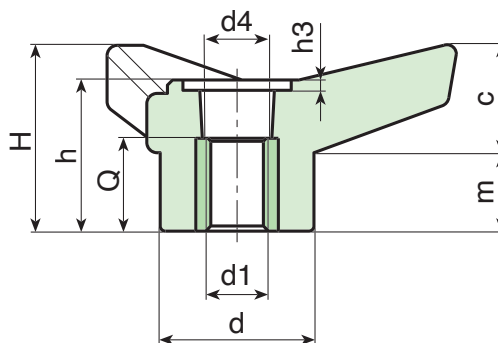
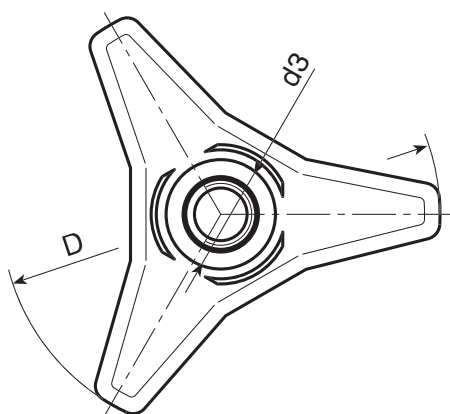
Solid Hub

Special requests:

- Upon request and for special quantities inserts can be supplied in different materials.
- Upon request and for special quantities available in the colours indicated in the chart on page .



06



Code	art.	D	H	h	d	c	m	d3	d4	h3	d1 _{6H}	Q	g
F663045.0002	F663045.TM0601	45	21	18	16	11	10	11	10	1	M6	12.5	11
F663045.0003	F663045.TM0801	45	21	18	16	11	10	11	10	1	M8	12.5	11
F663045.0005	F663045.TM1001	45	21	18	16	11	10	11	10	1	M10	12.5	11
F663065.0004	F663065.TM0801	65	28	23.5	22	16.5	11.5	15.5	13.5	1.5	M8	15.5	25
F663065.0005	F663065.TM1001	65	28	23.5	22	16.5	11.5	15.5	13.5	1.5	M10	15.5	26
F663065.0007	F663065.TM1201	65	28	23.5	22	16.5	11.5	15.5	13.5	1.5	M12	15.5	28
F663085.0004	F663085.TM0801	85	37	30.5	30	21	16	21	16	2	M8	13.5	50
F663085.0006	F663085.TM1001	85	37	30.5	30	21	16	21	16	2	M10	13.5	52
F663085.0007	F663085.TM1201	85	37	30.5	30	21	16	21	16	2	M12	13.5	52
F663105.0002	F663105.TM1001	105	45	37.5	35	26	19	24.5	16	2	M10	23	88
F663105.0004	F663105.TM1201	105	45	37.5	35	26	19	24.5	16	2	M12	23	88
F663105.0006	F663105.TM1401	105	45	37.5	35	26	19	24.5	16	2	M14	21	91
F663105.0009	F663105.TM1601	105	45	37.5	35	26	19	24.5	17.5	2	(*)M16	21	108
F663125.0002	F663125.TM1201	125	54	44	42.5	31	23	28.5	26	2	M12	31	152
F663125.0003	F663125.TM1401	125	54	44	42.5	31	23	28.5	26	2	M14	31	160
F663125.0004	F663125.TM1601	125	54	44	42.5	31	23	28.5	26	2	(*)M16	31	180
F663125.0006	F663125.TM1801	125	54	44	42.5	31	23	28.5	26	2	(*)M18	31	186

STAR HANDWHEEL WITH STEEL HUB AND THREADED STUD

Materials:

Reinforced polyamide. Resistant to oils and greases.

Surface finish:

Satin.

Colour:

Black (RAL 9011).

Inserts:

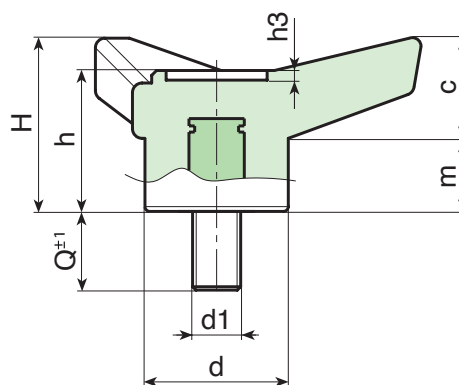
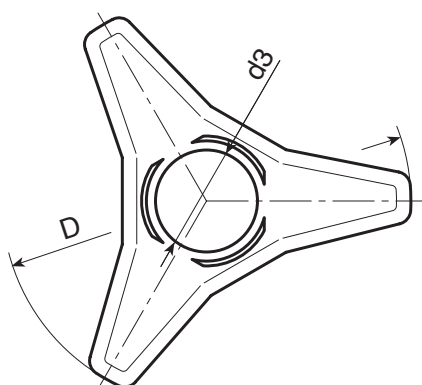
Galvanised steel threaded stud (thread tolerance 6g).

Hub:

Solid Hub

Special requests:

- Upon request and for special quantities inserts can be supplied with customised lengths.
- Upon request and for special quantities inserts can be supplied in different materials.
- Upon request and for special quantities available in the colours indicated in the chart on page .



Code	art.	D	H	h	d	c	m	d3	h3	LM	d1 _{6g}	Q	g
-	F664045.TM06X2001	45	21	18	16	11	10	11	1	60	M6	20	14
-	F664045.TM06X3001	45	21	18	16	11	10	11	1	60	M6	30	17
-	F664045.TM08X2001	45	21	18	16	11	10	11	1	60	M8	20	19
-	F664045.TM08X2501	45	21	18	16	11	10	11	1	60	M8	25	20,5
-	F664045.TM08X3001	45	21	18	16	11	10	11	1	60	M8	30	22
-	F664065.TM08X2001	65	28	23.5	22	16.5	11.5	15.5	1.5	80	M8	20	36
-	F664065.TM08X2501	65	28	23.5	22	16.5	11.5	15.5	1.5	80	M8	25	37,5
-	F664065.TM08X3001	65	28	23.5	22	16.5	11.5	15.5	1.5	80	M8	30	39
-	F664065.TM10X2001	65	28	23.5	22	16.5	11.5	15.5	1.5	80	M10	20	43
-	F664065.TM10X3001	65	28	23.5	22	16.5	11.5	15.5	1.5	80	M10	30	47
-	F664065.TM10X5001	65	28	23.5	22	16.5	11.5	15.5	1.5	80	M10	50	55
-	F664085.TM08X2001	85	37	30.5	30	21	16	21	2	60	M8	20	61
-	F664085.TM08X2501	85	37	30.5	30	21	16	21	2	60	M8	25	65
-	F664085.TM08X3001	85	37	30.5	30	21	16	21	2	60	M8	30	69
-	F664085.TM10X2501	85	37	30.5	30	21	16	21	2	60	M10	25	66
-	F664085.TM10X3001	85	37	30.5	30	21	16	21	2	60	M10	30	74
-	F664085.TM10X4001	85	37	30.5	30	21	16	21	2	60	M10	40	80
-	F664085.TM12X2001	85	37	30.5	30	21	16	21	2	60	M12	20	83
-	F664085.TM12X3001	85	37	30.5	30	21	16	21	2	60	M12	30	87
-	F664085.TM12X4001	85	37	30.5	30	21	16	21	2	60	M12	40	94
-	F664105.TM10X2001	105	46	37.5	35	26	19	25	2	80	M10	20	113
-	F664105.TM10X3001	105	46	37.5	35	26	19	25	2	80	M10	30	116
-	F664105.TM10X4001	105	46	37.5	35	26	19	25	2	80	M10	40	122
-	F664105.TM12X3001	105	46	37.5	35	26	19	25	2	80	M12	30	121
-	F664105.TM12X5001	105	46	37.5	35	26	19	25	2	80	M12	50	136
-	F664105.TM14X5001	105	46	37.5	35	26	19	25	2	80	M14	50	152
-	F664125.TM12X3001	125	54	44	42.5	31	23	28.5	2	100	M12	30	200
-	F664125.TM14X3001	125	54	44	42.5	31	23	28.5	2	100	M14	30	219
-	F664125.TM16X3001	125	54	44	42.5	31	23	28.5	2	100	M16	30	232

Customised stud lengths available for a minimum of 150 pieces.
LM = Maximum mouldable length.

W100HIN

NEW

+200°
-40°

AISI
304

RoHS
COMPLIANT

STAINLESS STEEL LOBED HANDWHEEL WITH THREADED HOLE

INOX

Materials:

Precision-cast stainless steel, (Aisi 304).

Surface finish:

Electropolished satin finish.

Colour:

Natural.

Hole:

Version HNM:

Female threaded hole (thread tolerance 6H).

Version HND:

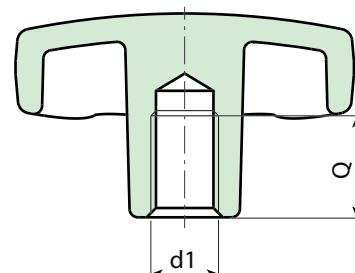
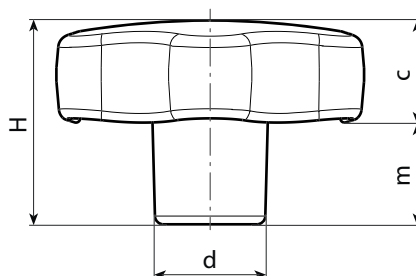
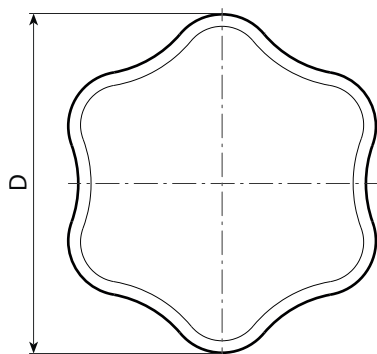
Blind smooth bore (bore tolerance H7).

Special requests:

- None.



06



Version HNM: with female threaded hole.

INOX

Code	Art.	D	H	d	m	d1 ^{6H}	Q	g
W10030.0002	W10030.HNM05HIN	30	21	11	11	M5	10	-
W10030.0003	W10030.HNM06HIN	30	21	11	11	M6	10	-
W10040.0003	W10040.HNM06HIN	40	24	13	12	M6	12	-
W10040.0004	W10040.HNM08HIN	40	24	13	12	M8	15	-
W10050.0003	W10050.HNM08HIN	50	31	15	13,5	M8	15	-
W10050.0004	W10050.HNM10HIN	50	31	15	13,5	M10	18	-
W10060.0003	W10060.HNM08HIN	60	39	17	18	M8	15	170
W10060.0004	W10060.HNM10HIN	60	39	17	18	M10	18	170
W10060.0005	W10060.HNM12HIN	60	39	17	18	M12	22	170

Version HND: with blind smooth bore H7

INOX

Code	Art.	D	H	d	m	d1 ^{H7}	Q	g
W10040.0002	W10040.HND08HIN	40	24	13	12	08	15	-
W10050.0002	W10050.HND10HIN	50	31	15	13,5	10	18	-
W10060.0002	W10060.HND12HIN	60	39	17	18	12	22	170

W101HIN

NEW

+200°
-40°

Aisi
304

RoHS
COMPLIANT

STAINLESS STEEL LOBED HANDWHEEL WITH THREADED STUD

INOX

Materials:

Precision-cast stainless steel, (Aisi 304).

Surface finish:

Electropolished satin finish.

Colour:

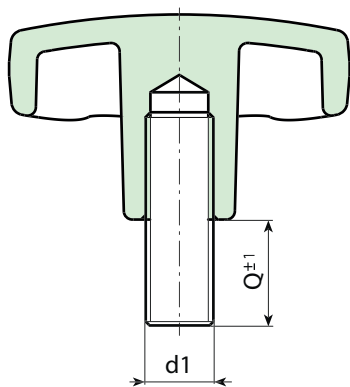
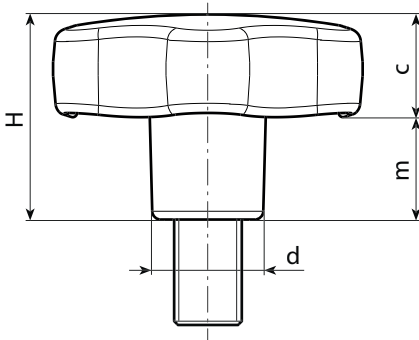
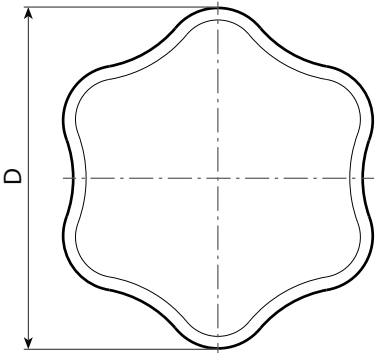
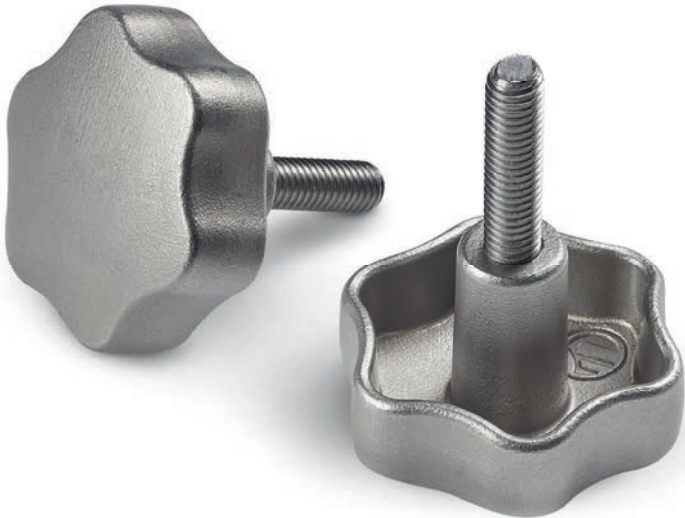
Natural.

Stud:

Threaded stainless steel stud (AISI 303) (thread tolerance 6g), assembled and fixed with high-strength threadlocker.

Special requests:

- Upon request and for a minimum of 50 pieces inserts can be supplied with customised lengths.



INOX

Code	Art.	D	H	d	m	d1 _{6H}	Q	g
W10130.0001	W10130.HNM05X15HIN	30	21	11	11	M5	15	-
W10130.0002	W10130.HNM06X15HIN	30	21	11	11	M6	15	-
W10140.0001	W10140.HNM06X20HIN	40	24	13	12	M6	20	-
W10140.0002	W10140.HNM08X20HIN	40	24	13	12	M8	20	-
W10150.0001	W10150.HNM08X30HIN	50	31	15	13,5	M8	30	-
W10150.0002	W10150.HNM10X30HIN	50	31	15	13,5	M10	30	-
W10160.0001	W10160.HNM08X30HIN	60	39	17	18	M8	30	-
W10160.0002	W10160.HNM10X30HIN	60	39	17	18	M10	30	-
W10160.0003	W10160.HNM12X30HIN	60	39	17	18	M12	30	-

W102HIN

NEW

+200°
-40°

AISI
304

RoHS
COMPLIANT

SOLID STAINLESS STEEL LOBED HANDWHEEL WITH THREADED HOLE

INOX

Materials:

Precision-cast stainless steel, (Aisi 304).

Surface finish:

Electropolished satin finish.

Colour:

Natural.

Hole:

Version HNM:

Female threaded hole (thread tolerance 6H).

Version HND:

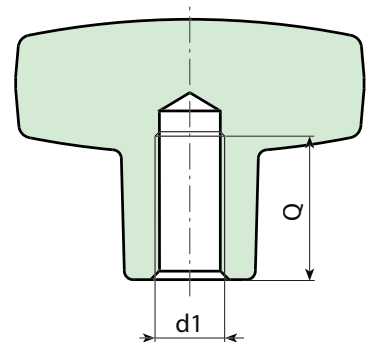
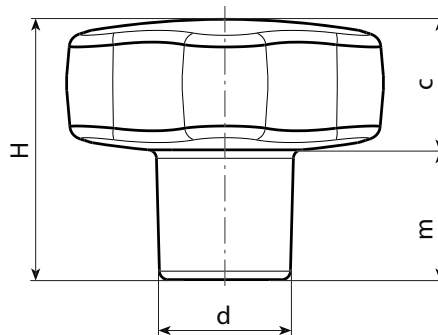
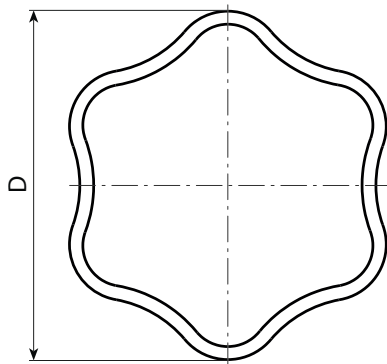
Blind smooth bore (bore tolerance H7).

Special requests:

- None.



06



Version HNM: with female threaded hole.

INOX

Code	Art.	D	H	d	m	d1 ^{6H}	Q	g
W10230.0002	W10230.HNM05HIN	30	21	11	11	M5	10	-
W10230.0003	W10230.HNM06HIN	30	21	11	11	M6	12	-
W10240.0003	W10240.HNM06HIN	40	30	15	15	M6	12	-
W10240.0004	W10240.HNM08HIN	40	30	15	15	M8	15	-
W10250.0003	W10250.HNM08HIN	50	34	17	17	M8	15	-
W10250.0004	W10250.HNM10HIN	50	34	17	17	M10	18	-
W10260.0003	W10260.HNM08HIN	60	39	21	18	M08	15	360
W10260.0004	W10260.HNM10HIN	60	39	21	18	M10	18	360
W10260.0005	W10260.HNM12HIN	60	39	21	18	M12	22	360

Version HND: with blind smooth bore H7

INOX

Code	Art.	D	H	d	m	d1 ^{H7}	Q	g
W10240.0002	W10240.HND08HIN	40	30	15	15	8	15	-
W10250.0002	W10250.HND10HIN	50	34	17	17	10	18	-
W10260.0002	W10260.HND12HIN	60	39	21	18	12	22	360

W103HIN

NEW

+200°
-40°

Aisi
304

RoHS
COMPLIANT

SOLID STAINLESS STEEL LOBED HANDWHEEL WITH THREADED STUD

INOX

Materials:

Precision-cast stainless steel, (Aisi 304).

Surface finish:

Electropolished satin finish.

Colour:

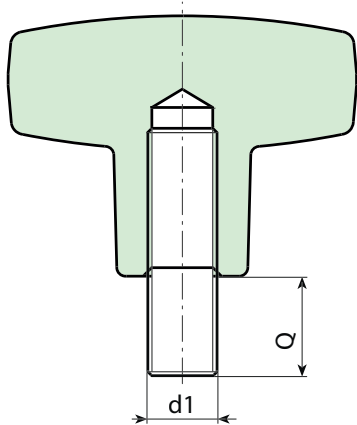
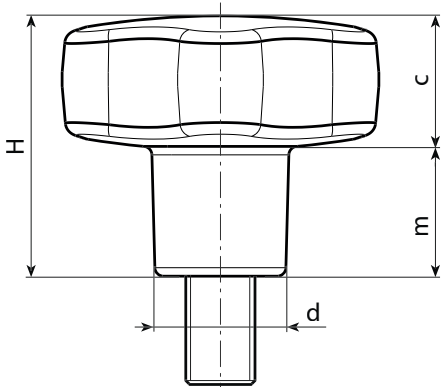
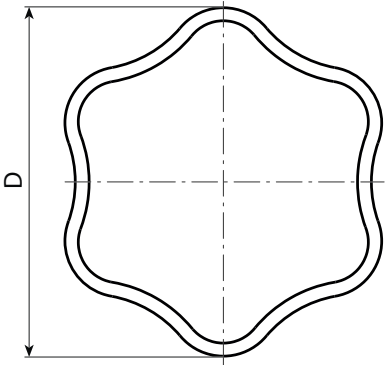
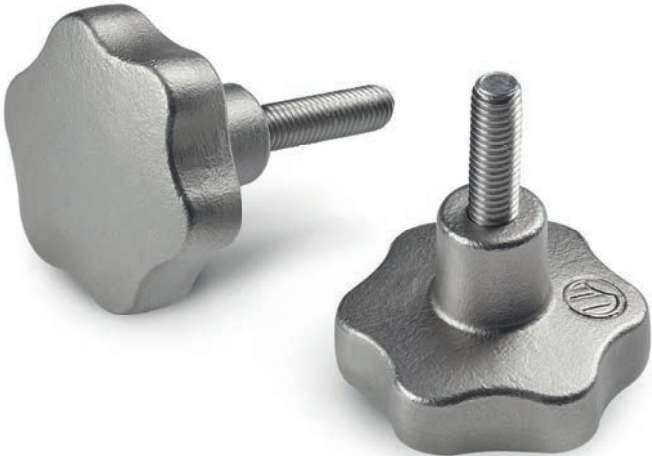
Natural.

Stud:

Threaded stainless steel stud (AISI 303) (thread tolerance 6g), assembled and fixed with high-strength threadlocker.

Special requests:

- Upon request and for a minimum of 50 pieces inserts can be supplied with customised lengths.



INOX

Code	Art.	D	H	d	m	d1 _{6H}	Q	g
W10330.0001	W10330.HNM05X15HIN	30	21	11	11	M5	15	-
W10330.0002	W10330.HNM06X15HIN	30	21	11	11	M6	20	-
W10340.0001	W10340.HNM06X20HIN	40	30	15	15	M6	20	-
W10340.0002	W10340.HNM08X20HIN	40	30	15	15	M8	20	-
W10350.0001	W10350.HNM08X30HIN	50	34	17	17	M8	30	-
W10350.0002	W10350.HNM10X30HIN	50	34	17	17	M10	30	-
W10360.0001	W10360.HNM08X30HIN	60	39	21	18	M08	30	-
W10360.0002	W10360.HNM10X30HIN	60	39	21	18	M10	30	-
W10360.0003	W10360.HNM12X30HIN	60	39	21	18	M12	30	-

Y335

DIN 6335 - E DESIGN - ALUMINIUM CROSS HANDWHEEL



Materials:

Aluminium alloy.

Surface finish:

Smooth, turned.

Y335:

Tumbled then electrolytically finished surface.

Y335L:

Mirror polished surface finish.

Colour:

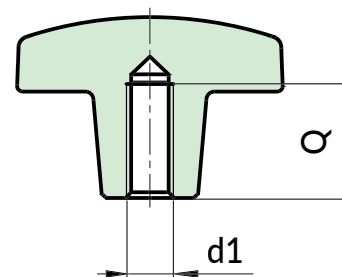
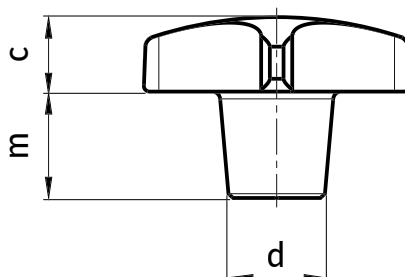
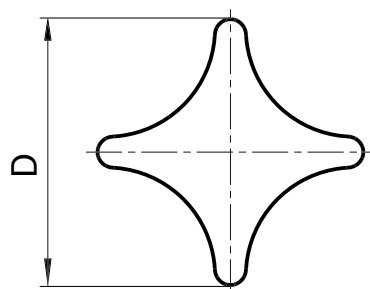
Natural.

Hole:

Female threaded hole (thread tolerance 6H).

Special requests:

- None.



Version Y335: Tumbled surface finish

Code	Art.	D	d	H	m	c	d1 _{6H}	Q	g
Y335040.0001	Y335040.AM08	40	14	25	14	11	M8	15	25
Y335050.0001	Y335050.AM10	50	18	32	20	12	M10	18	40
Y335063.0001	Y335063.AM12	63	20	40	25	15	M12	22	90
Y335080.0001	Y335080.AM16	80	25	50	30	20	M16	28	180

Version Y335 L: Mirror polished surface finish

Code	Art.	D	d	H	m	c	d1 _{6H}	Q	g
Y335040.0002	Y335040.AM08L	40	14	25	14	11	M8	15	25
Y335050.0002	Y335050.AM10L	50	18	32	20	12	M10	18	40
Y335063.0002	Y335063.AM12L	63	20	40	25	15	M12	22	90
Y335080.0002	Y335080.AM16L	80	25	50	30	20	M16	28	180
Y336063.0004	Y336063.AM12L	63	20	40	21	19	M12	22	107
Y336080.0002	Y336080.AM12L	80	25	50	25	25	M12	28	320

Y336



DIN 6336 - E DESIGN - ALUMINIUM STAR HANDWHEEL

Materials:

Aluminium alloy.

Surface finish:

Smooth, turned.

Y336:

Tumbled then electrolytically finished surface.

Y336L:

Mirror polished surface finish.

Colour:

Natural.

Hole:

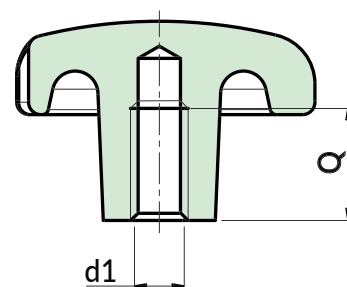
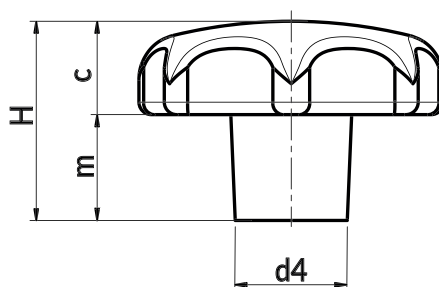
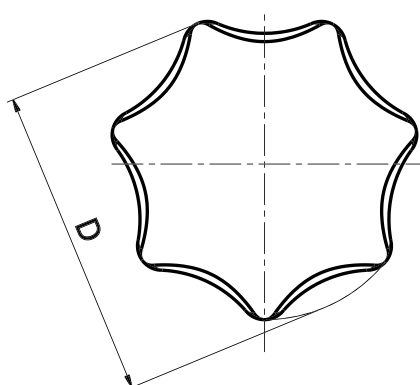
Female threaded hole (thread tolerance 6H).

Special requests:

- None.



06



Version Y336: Tumbled surface finish

Code	Art.	D	d	H	m	c	d1 _{6H}	Q	g
Y336040.0001	Y336040.AM08	40	14	25	13	12	M8	15	35
Y336050.0003	Y336050.AM10	50	18	32	17	15	M10	18	54
Y336063.0003	Y336063.AM12	63	20	40	21	19	M12	22	107
Y336080.0003	Y336080.AM16	80	25	50	25	25	M16	28	300

Version Y336 L: Mirror polished surface finish

Code	Art.	D	d	H	m	c	d1 _{6H}	Q	g
Y336040.0002	Y336040.AM08L	40	14	25	13	12	M8	15	35
Y336050.0004	Y336050.AM10L	50	18	32	17	15	M10	18	54
Y336063.0004	Y336063.AM12L	63	20	40	21	19	M12	22	107
Y336080.0004	Y336080.AM16L	80	25	50	25	25	M16	28	300