



HPV1 SERIES

HYDRAULIC PILOT
CONTROL

TECHNICAL CATALOGUE

HYDRAULIC PILOT CONTROL

HPV1C Pilot Control Valves are well established products within the HANSA TMP range.

The pilot valve, with its single lever dual axis control, is supported by an extensive range of characteristics and handle options which make it suitable for a wide range of both mobile and industrial applications.

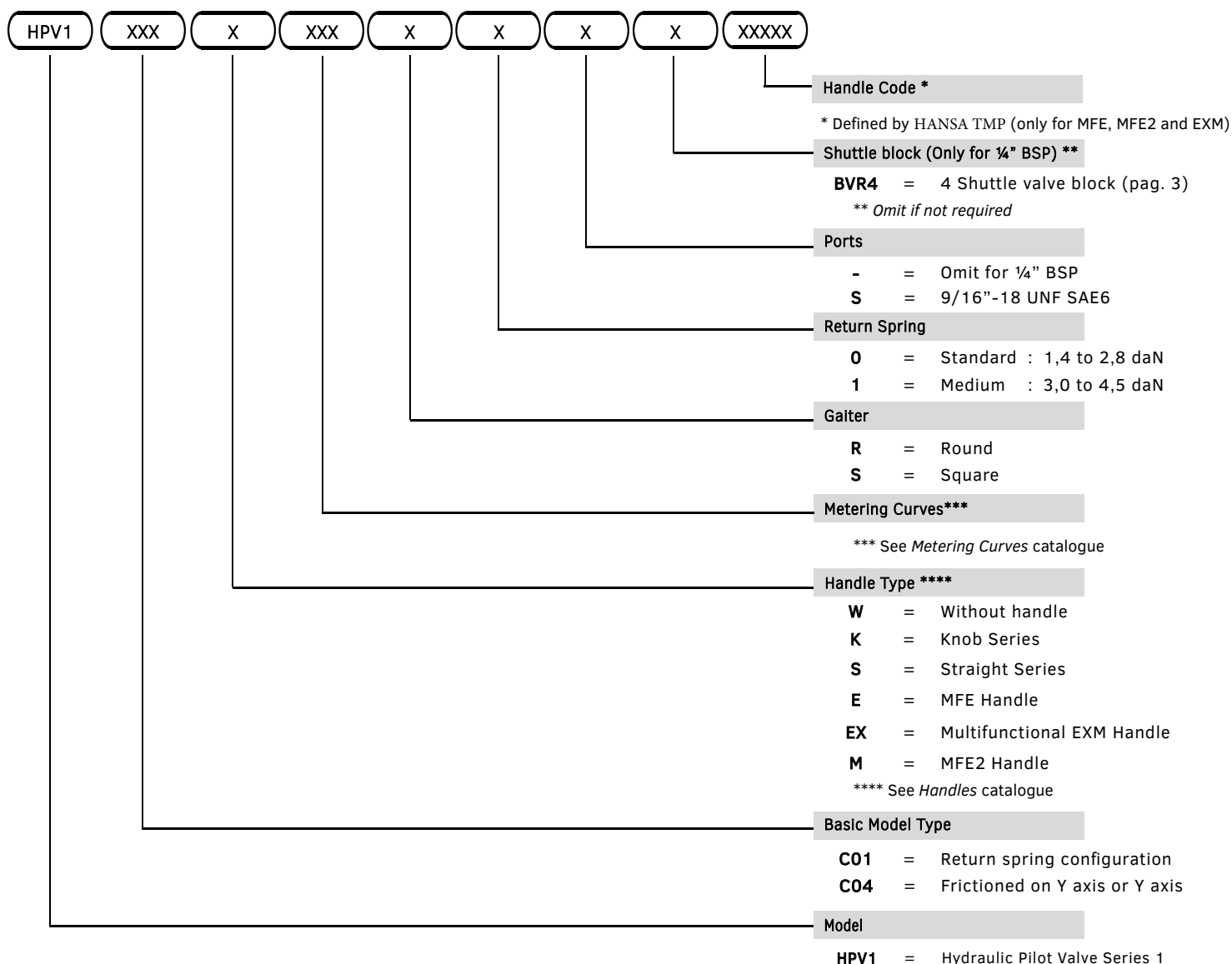
Our engineers can offer special support to optimise this product to suit your application.

BENEFITS

- Compact and lightweight
- All ports on bottom face for easy installation
- Suitable for armrest of console mounting
- Compatible with a wide range of application
- Operator is protected from high temperature components
- Low hysteresis and high accuracy
- Wide range of electrical options in both standard and ergonomic multifunctional handles
- Handily lever control with no effort

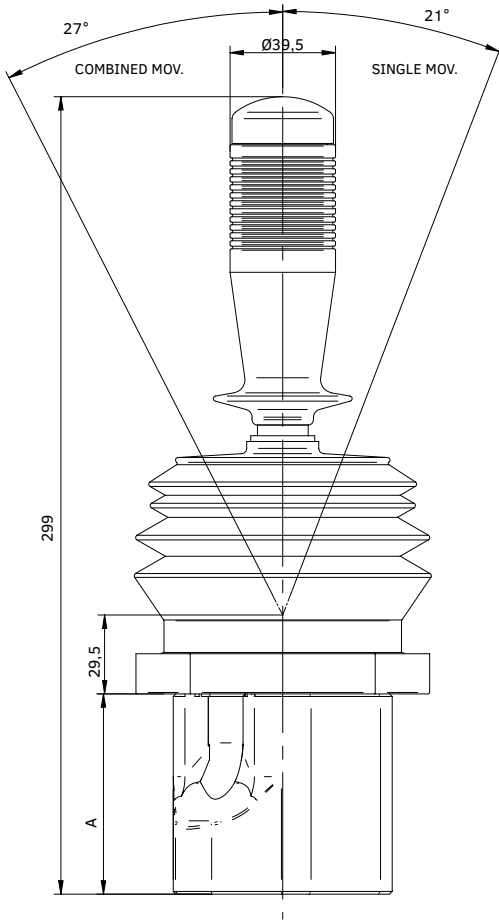
HPV SERIES - MODEL CODING

HANSA TMP reserves the right to update the information and data contained in this catalogue at any time without notice

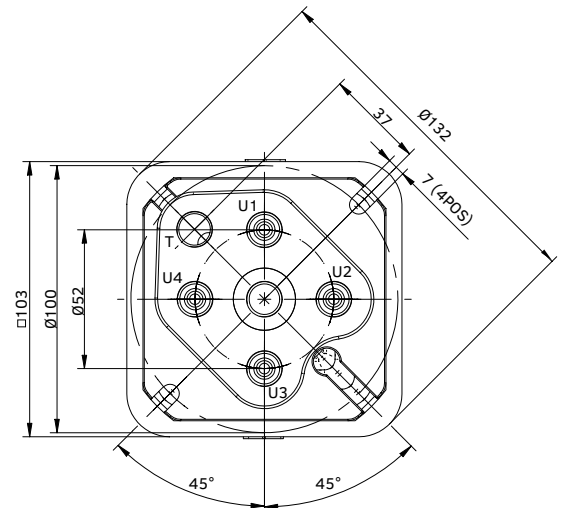
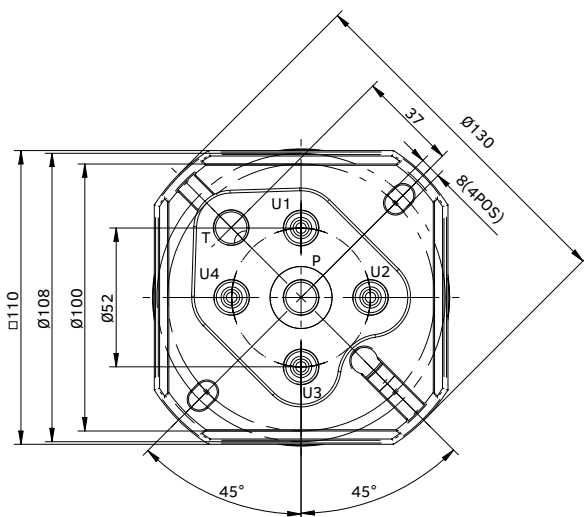
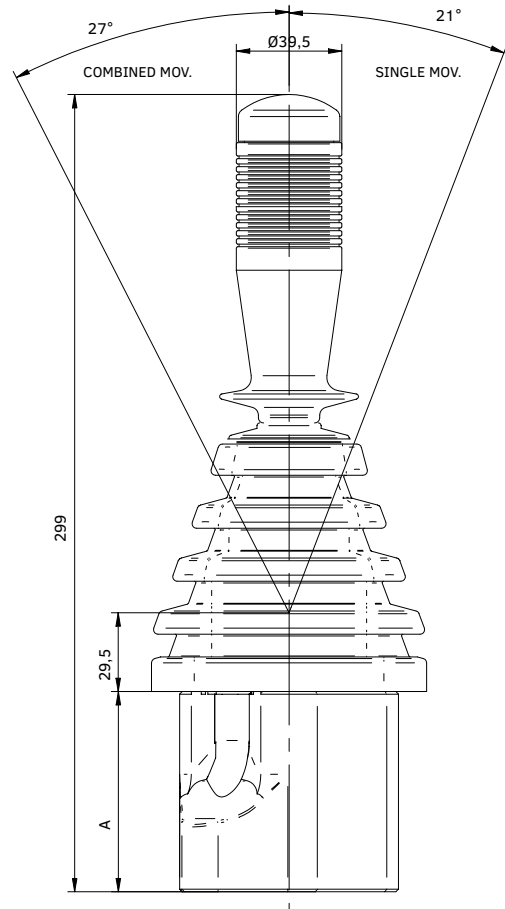


Example: HYDRAULIC PILOT VALVE SERIES 1, MODEL TYPE C01, MFE HANDLE, METERING CURVES 015, SQUARE GAITER, RETURN SPRING 0, MFE HANDLE N. 13383: **HPV1-C01-E-015-S-0-13383**

WITH ROUND GAITER



WITH SQUARE GAITER



A= 75mm for 1/4" BSP PORTS
 A= 82mm for 9/16"-18 SAE6 PORTS



HANSA-TMP S.r.l.

Via M. L. King, 6 – 41122 Modena (ITALY)

Tel.: +39 059 415 711

Fax: +39 059 415 730

E-mail: hansatmp@hansatmp.it

Website: www.hansatmp.it

Certified Company

ISO 9001:2015 – ISO 14001:2015



Share Capital: € 300.000,00

VAT Number: IT01167360369

REA Number: MO-225785



HANSA-TMP
MANUFACTURING YOUR SUCCESS



HPV2 SERIES

HYDRAULIC PILOT
CONTROL

TECHNICAL CATALOGUE

HYDRAULIC PILOT CONTROL

HPV2 Pilot Control Valves are part of the extensive range of HANSA TMP products.

This product has a new design meant to provide a comfortable and fine control for mobile and industrial machines. The pilot valve, with its single lever dual axis control, is supported by an extensive range of characteristics and handle options which make it suitable for a wide range of both mobile and industrial applications.

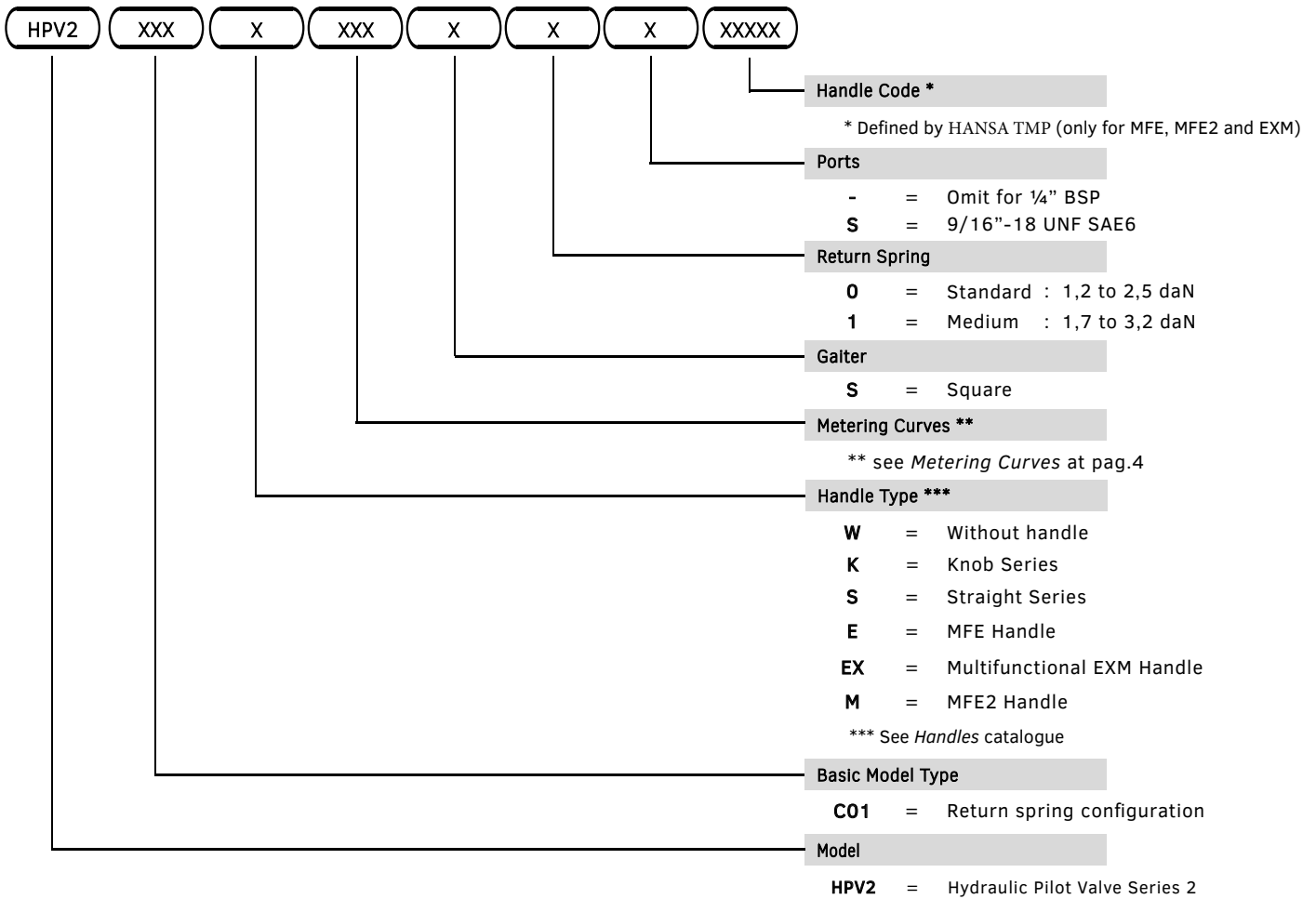
Our engineers can offer special support to optimise this product to suit your application.

BENEFITS

- Compact and lightweight body
- Low effort control and smooth movements
- Rugged construction for long operating life
- Spare parts available upon request
- Suitable for armrest of control mounting
- Compatible with a wide range of products
- Low hysteresis, high accuracy, pressure control curves
- Wide range of electrical options in multi-functional ergonomic handles

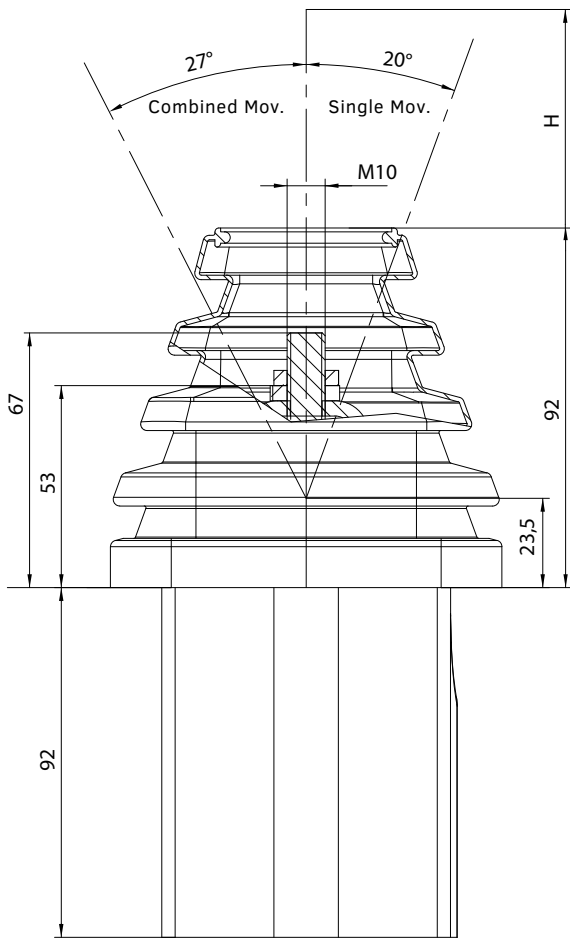
HPV2 SERIES - MODEL CODING

HANSA TMP reserves the right to update the information and data contained in this catalogue at any time without notice



Example: HYDRAULIC PILOT VALVE SERIES 2, MODEL TYPE C01, RETURN SPRING CONFIGURATION, MFE HANDLE, METERING CURVE N.015, SQUARE GAITER, RETURN SPRING 0, MFE HANDLE N. 11163: **HPV2-C01-E015-S-0-11163**

HPV2

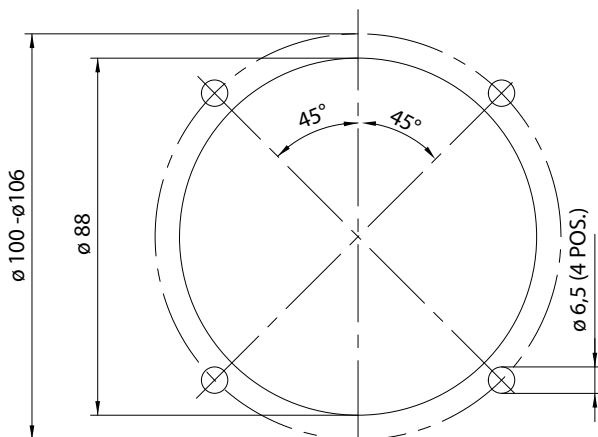


HANDLES ***

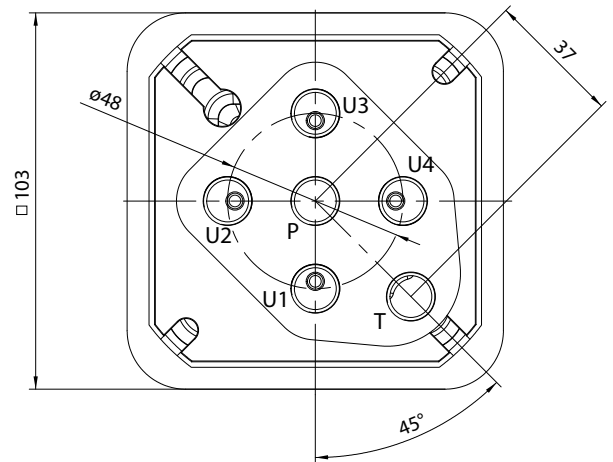


Configuration	Approx Net Weight	Handle Height (H)
Only Body & Gaiter	1.4 Kg	-
With S Handle	1.7 Kg	131 mm
With MFE2 Handle	1.8 Kg	153 mm
With MFE Handle	1.7 Kg	154 mm
With EXM Handle	1.6 Kg	137 mm

INSTALLATION DRAWING



FOOTPRINT

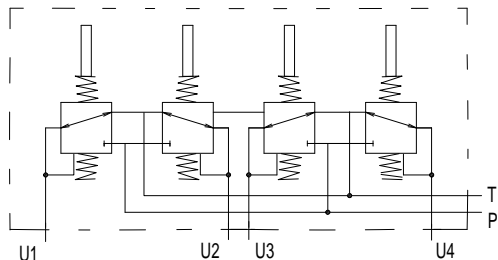


*** All handles can be fully customized to fit customer application. See *Handles* catalogue for more details.

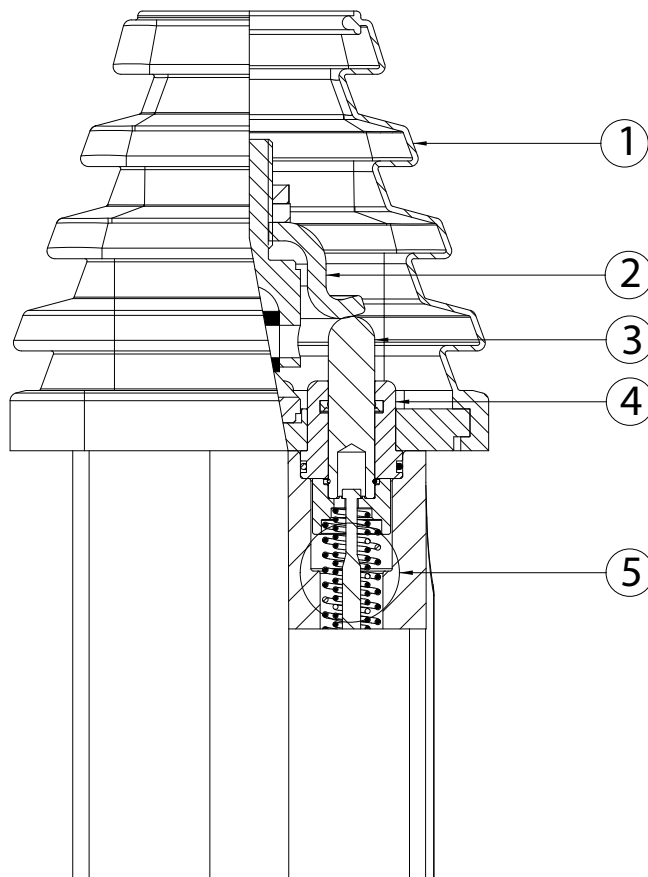
TECHNICAL FEATURES

Service Ports: P, T, U1, U3, U4, ¼BSP or 9/16 UNF
 Maximum inlet pressure: Port P - 50 bar
 Maximum back pressure: Port T - 3 bar
 Supply flow range: From 5 up to 15 l/min
 Maximum Hysteresis: +/- 0.5 bar
 Fluid: Mineral Oils ISO, HM and HV
 Contamination class: 20/18/15 ISO 4406:1999
 Fluid temperature range: From -20° to 80° C

HYDRAULICS CIRCUIT DIAGRAM



SPARE PARTS



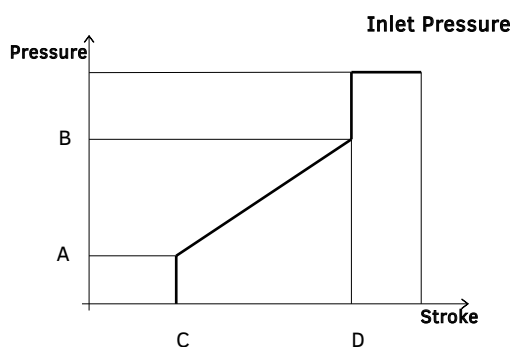
APPLICATIONS

- Excavator and Mini-excavators
- Crane
- Forestry Machines
- Access platforms
- Container Handlers
- Tracked Machines
- Skid steer loader
- Forklift trucks

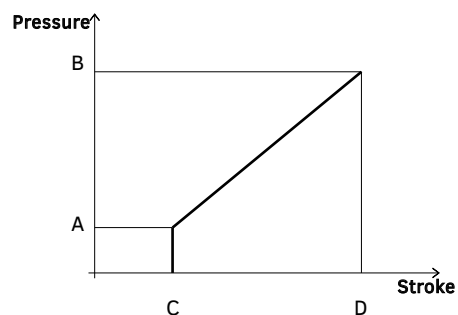
POS	Description	Part Number
1	Gaiter	P9634000353
2	Operating Disc	P9734000053
3	Kit Plunger	G9734000003 (for curve with step) G9734000013 (for curve no step)
4	Kit guide-seals	G9734000023 (with o-ring and seal)
5	Kit Metering Curve	G97349YXXX3 (Y=return spring type; XXX=ID curve number) ¹

¹ See Page 1 for Spring type, see page 4 for ID curve number

METERING CURVES WITH STEP ²



METERING CURVES WITHOUT STEP ²



PRESSURE (Bar)		STROKE (mm)		ID CURVE
A	B	C	D	
2.9	15.1	1	7,5	CR2-078
3.0	10.2	1	7,5	CR2-051
3.0	20,5	1	7,5	CR2-121
3.5	17.5	1	7,5	CR2-062
4.0	16.6	1	7,5	CR2-201
4.5	17.2	1	7,5	CR2-117
4.5	27.2	1	7,5	CR2-108
4.8	19.7	1	7,5	CR2-018
5.0	16.0	1	7,5	CR2-026
5.0	25.0	1	7,5	CR2-109
5.4	22.8	1	7,5	CR2-015
5.5	25.5	1	7,5	CR2-139
5.8	23.5	1	7,5	CR2-082
6.8	15.2	1	7,5	CR2-100
7.0	21.4	1	7,5	CR2-081

PRESSURE (Bar)		STROKE (mm)		ID CURVE
A	B	C	D	
2.3	14.5	1	8	CR2-060
3.1	43.5	1	8	CR2-206
3.2	27.4	1	8	CR2-068
3.6	19.2	1	8	CR2-096
4.8	20.5	1	8	CR2-203
5.0	18.8	1	8	CR2-079
5.2	23.2	1	8	CR2-074
5.4	24.4	1	8	CR2-036
5.5	27.0	1	8	CR2-075
5.9	30.1	1	8	CR2-133
6.9	29.7	1	8	CR2-001
9	27.5	1	8	CR2-039
9.1	28	1	8	CR2-003

² Tolerance on pressure settings ± 0.5 bar. Other metering curves available upon request.



HANSA-TMP S.r.l.

Via M. L. King, 6 – 41122 Modena (ITALY)

Tel.: +39 059 415 711

Fax: +39 059 415 730

E-mail: hansatmp@hansatmp.it

Website: www.hansatmp.it

Certified Company

ISO 9001:2015 – ISO 14001:2015



Share Capital: € 300.000,00

VAT Number: IT01167360369

REA Number: MO-225785



HANSA-TMP

MANUFACTURING YOUR SUCCESS



HANDLES

RANGE

TECHNICAL CATALOGUE

HANDLES

The HANSA TMP handles are available for fitting either to HANSA TMP pilot valves or other types of devices. The handles can also be used as stand alone device in many applications.

The selected materials suit both indoor or outdoor environments and are reliable, strong and suitable for heavy duty applications.

Wide range of knobs and straight lever are available with different options, integrating switches and push buttons. Ergonomical MFE, EXM, and MFE2 handles offer multifunction and bespoke solutions for the most demanding applications; they can be equipped with a wide range of controls: rocker switch, proportional roller, minijoystick, latched or momentary push buttons, toggle switch, four way switch etc.

The ergonomic handles are available for both left and right operation selecting the proper tilting option. MFE2 Handle is ready for standalone applications, integrating a specific electronic board. Different circuit arrangements can be accommodated within the handle and the wiring can be designed as per customer's specifications.

Our engineers can offer special support to meet customer's requirements.

BENEFITS

- Many configurations available for knobs and straight handles suitable for both single and dual axis control
- Extensive range of electrical switch and button options
- All handles suitable to both HANSA TMP and other manufacturers equipments
- Spare parts available for maintenance
- Configurable for right and left hand operation
- Suitable to many environmental conditions
- High durability, low maintenance
- Standard safety switch or capacitive safety function available also to match redundancy requirements and different output currents ratings

KNOB AND STRAIGHT - MODEL CODING

HANSA TMP reserves the right to update the information and data contained in this catalogue at any time without notice

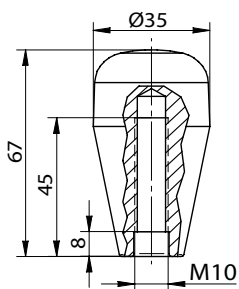
K- KNOB SERIES

KB	=	Duroplast knob
KC	=	Technopolymer knob
KD	=	Duroplast knob with switch
KK	=	Duroplast knob with rubber cap
KP	=	Duroplast spherical knob
KW	=	Duroplast knob with switch

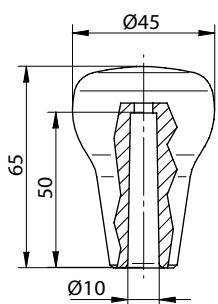
S- STRAIGHT SERIES

SA	=	Handle without electric switch
SD	=	Handle with electric switch
SS	=	Handles with electric switch to close and safety button
SX	=	Handle with electric switch to close
SY	=	Handle with electric switch dual rocker type
SZ	=	Handle with 2 or 3 positions latched rocker

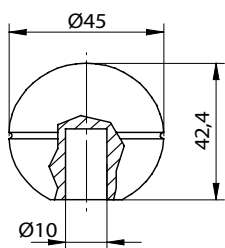
KB - DUROPLAST KNOB



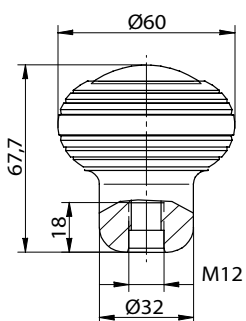
KC - TECHNOPYMER KNOB



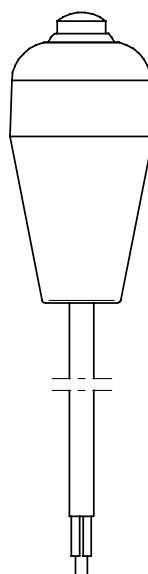
KP - DUROPLAST SPHERICAL KNOB



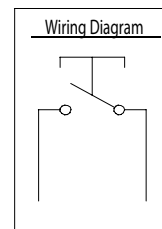
KK - DUROPLAST KNOB WITH RUBBER CAP



KD - DUROPLAST KNOB WITH SWITCH

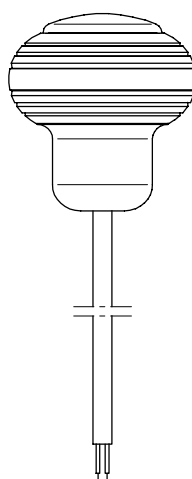


Protection: IP64
 Rating current: 5A@28VDC
 resistive load
 Electrical life: 25,000 cycles
 Mechanical life: 10⁶ cycles

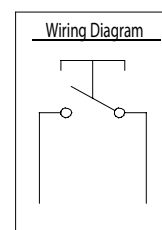


For installation dimensions see Knob KB

KW - DUROPLAST KNOB WITH SWITCH

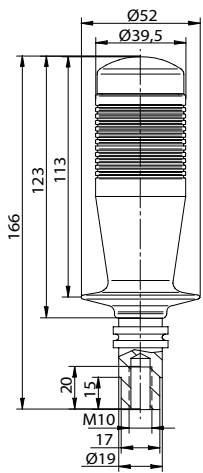


Protection: IP54
 Rating current: 6A@250VAC
 Mechanical life: 10⁷ cycles

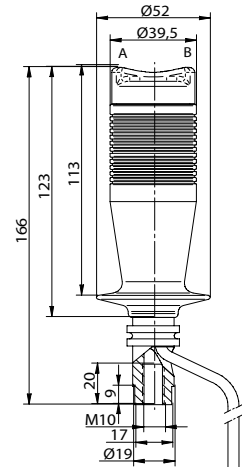


For installation dimensions see Knob KK

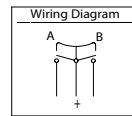
SA - WITHOUT SWITCH



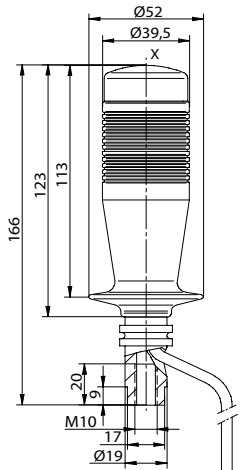
SY - WITH ONE MOMENTARY 3 POSITION ROCKER



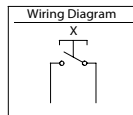
Sealing: IP54
 Rating currents: 16A@250VAC
 Mechanical life: 10⁶ cycles
 Electrical life: 5x10⁴ cycles



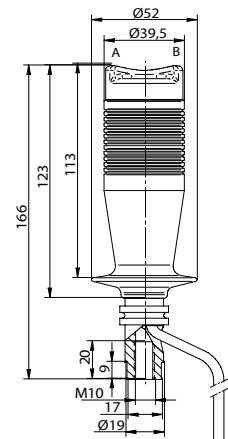
SX - WITH ONE SWITCH ON THE TOP



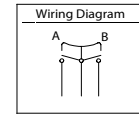
Sealing: IP54
 Rating currents: 16A@250VAC
 Mechanical life: 10⁶ cycles
 Electrical life: 5x10⁴ cycles



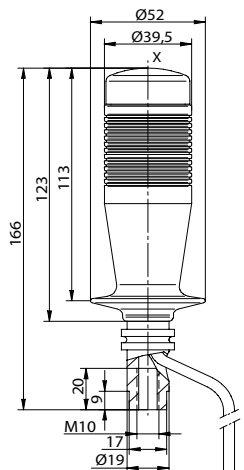
SZ3 - WITH 3 LATCHED Pos. | SZ2 - WITH 2 LATCHED Pos.



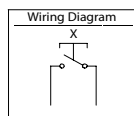
Sealing: IP54
 Rating currents: 16A@28VDC
 Mechanical life: 10⁶ cycles
 Electrical life: 25x10⁴ cycles



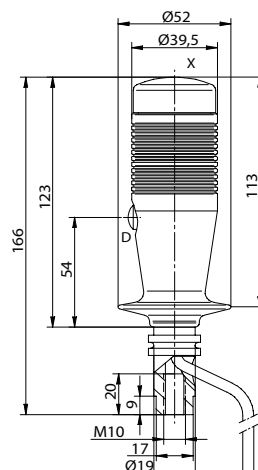
SS - WITH ONE SWITCH ON THE TOP WITH SAFETY CAGE



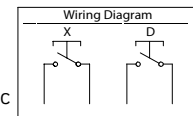
Sealing: IP54
 Rating currents: 16A@250VAC
 Mechanical life: 10⁶ cycles
 Electrical life: 5x10⁴ cycles



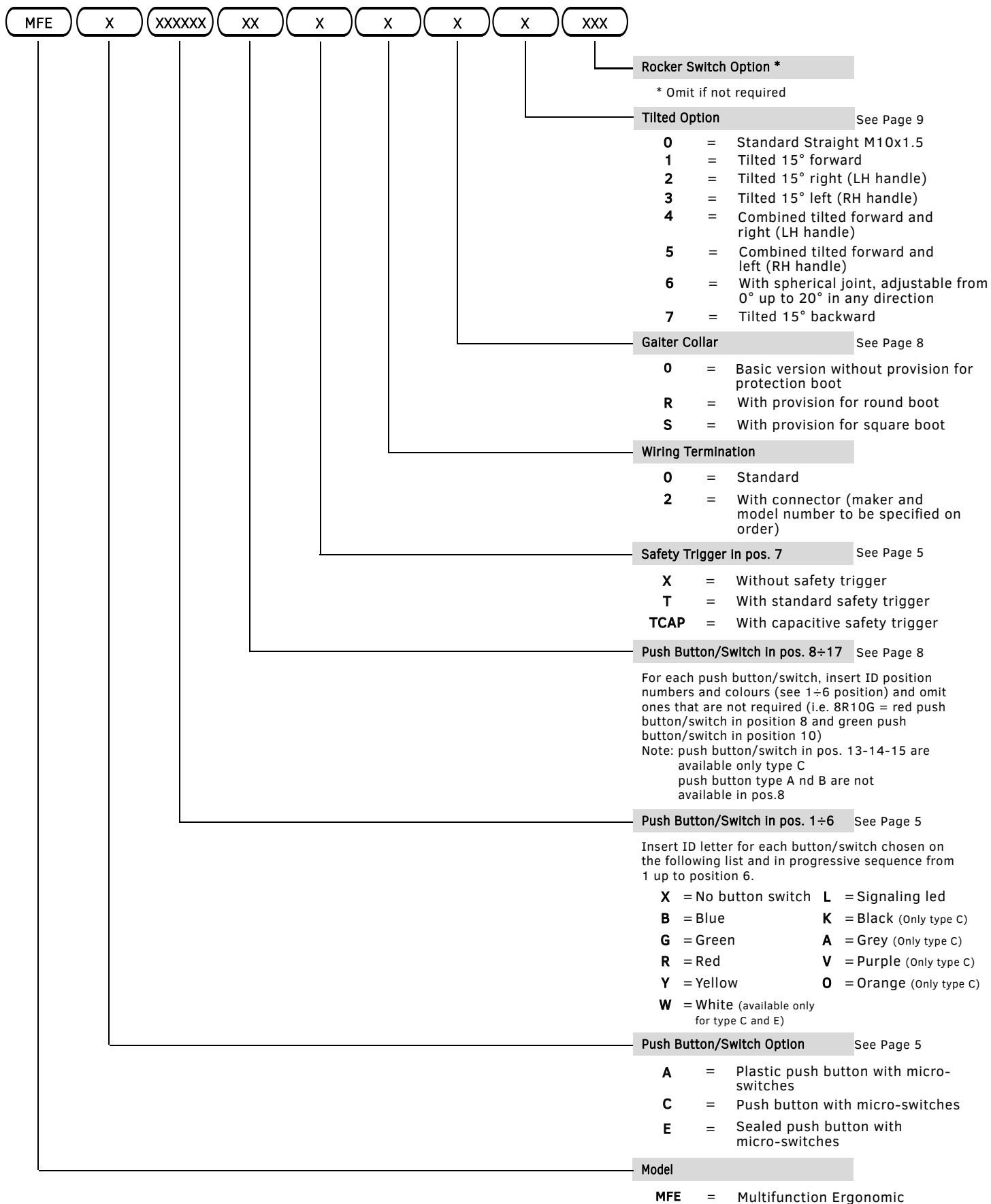
SD - WITH ONE SWITCH ON THE TOP AND ONE ON THE SIDE



Sealing: IP54
 Rating currents: 16A@250VAC/5A@28VDC
 Mechanical life: 10⁶ cycles
 Electrical life: 2x10⁴/25x10³ cycles



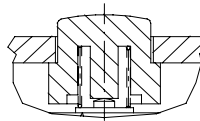
MFE - MODEL CODING



Example: MULTIFUNCTION ERGONOMIC HANDLE, PUSH BUTTON C, POS.1 BLUE BUTTON, POS.4 RED BUTTON, WITHOUT SAFETY TRIGGER, STANDARD TERMINALS, SQUARE BOOT, TILTED 15° FORWARD: **MFE-C-1BXXRXX-X0S1**

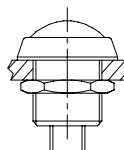
A - PLASTIC PUSH BUTTON

Protection:	IP40
Rating currents:	5A@30VDC resistive load
Input voltage range:	30 VDC
Electrical life:	10 ⁴ cycles
Mechanical life:	2x10 ⁶ cycles



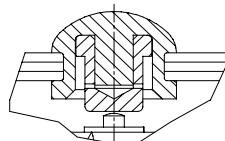
C - ISOLATED PUSH BUTTON

Protection:	IP64
Rating currents:	5A@28VDC resistive load
Electrical life:	25x10 ³ cycles
Mechanical life:	10 ⁶ cycles



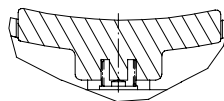
E - SEALED SERVICEABLE PUSH BUTTON

Protection:	IP40
Rating currents:	5A@30VDC resistive load
Input voltage range:	30 VDC
Electrical life:	10 ⁴ cycles
Mechanical life:	2x10 ⁶ cycles



T - SAFETY TRIGGER

Protection:	IP40
Rating currents:	5A@30VDC resistive load
Input voltage range:	30 VDC
Electrical life:	10 ⁴ cycles
Mechanical life:	2x10 ⁶ cycles



TCAP - CAPACITIVE SAFETY TRIGGER

Protection:	IP65 / IP54 for redundant version
Rating currents:	100mA/ up to 3A for redundant version
Input voltage range:	10-30 VDC
Electrical life:	3x10 ⁶ cycles

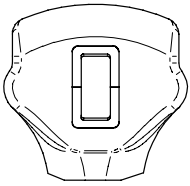


S - TYPE

Protection: IP68S
 Rating currents: 16A@28VDC
 resistive load
 Mechanical life: 10^5 cycles
 Electrical life: 25×10^3 cycles



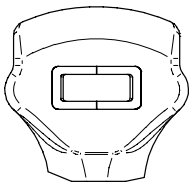
VERTICAL MOUNTED



S1B: IP68S 3 positions momentary rocker switch
S2B: IP68S 3 positions latched rocker switch

S5B: IP68S 2 positions latched rocker switches
S3B: IP68S 3 positions latched and momentary rockers

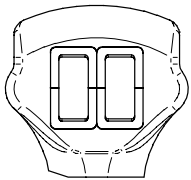
HORIZONTAL MOUNTED



S1A: IP68S 3 position momentary rocker switch
S2A: IP68S 3 position latched rocker switch

S5A: IP68S 2 positions latched rocker switches
S3A: IP68S 3 positions latched and momentary rockers

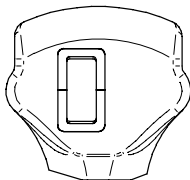
TWO VERTICAL MOUNTED



S4A: IP68S 3 position momentary rocker switch
S4B: IP68S 3 position latched rocker switch

S5E: IP68S 2 positions latched rocker switches
S3E: IP68S 3 positions latched and momentary rockers

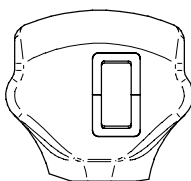
VERTICAL MOUNTED LEFT OFFSET



S1C: IP68S 3 position momentary rocker switch
S2C: IP68S 3 position latched rocker switch

S5C: IP68S 2 positions latched rocker switches
S3C: IP68S 3 positions latched and momentary rockers

VERTICAL MOUNTED RIGHT OFFSET



S1D: IP68S 3 position momentary rocker switch
S2D: IP68S 3 position latched rocker switch

S5D: IP68S 2 positions latched rocker switches
S3D: IP68S 3 positions latched and momentary rocker

D - 4 WAY ON-OFF SWITCH

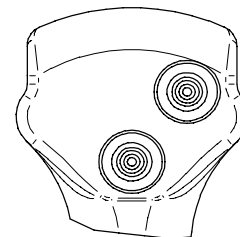
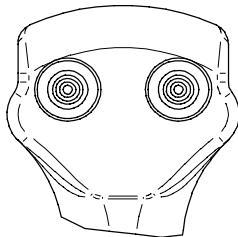
Protection: IP68S
 Rating current: 1A@28VDC inductive
 Electrical life: 10⁵ Cycles



DLDRDB - 3 SWITCHES

DLDR - 2 SWITCHES TOP

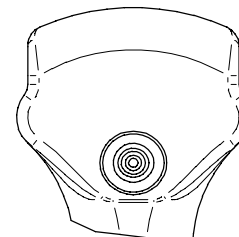
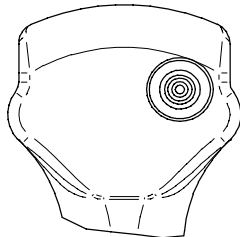
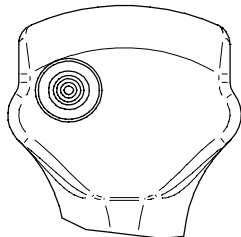
DRDB - 2 SWITCHES RIGHT



DL - 1 SWITCH LEFT

DR - 1 SWITCH RIGHT

DB - 1 SWITCH CENTER



RP - PROPORTIONAL ROLLER

Supply voltage: 5 VDC
 Sealing: IP68S
 Output signal: 0,5-4,5 VDC with 2,5V in neutral position
 Mechanical life: 3x10⁶ Cycles

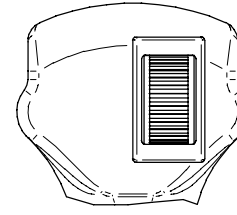
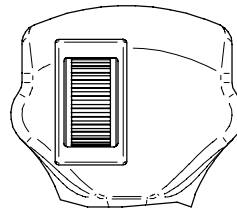
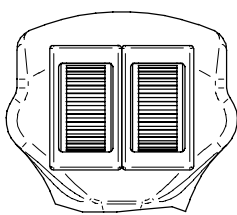
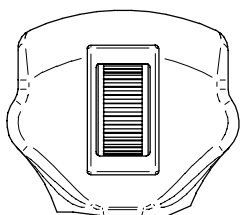


RP - ONE CENTERED

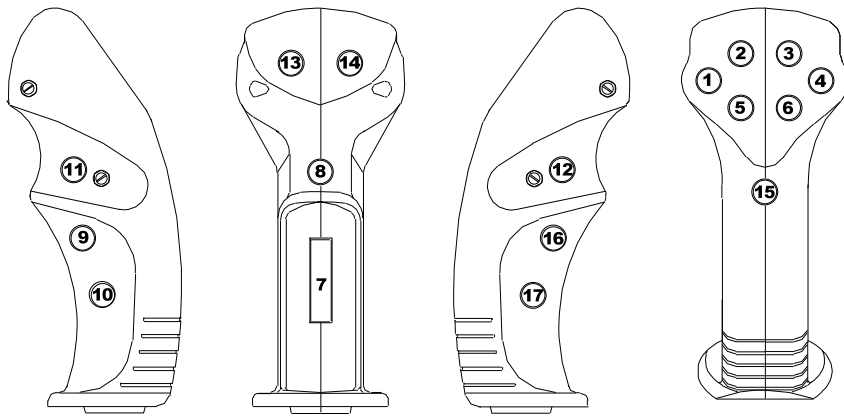
2RP - TWO CENTERED

RPS - ONE LEFT OFFSET

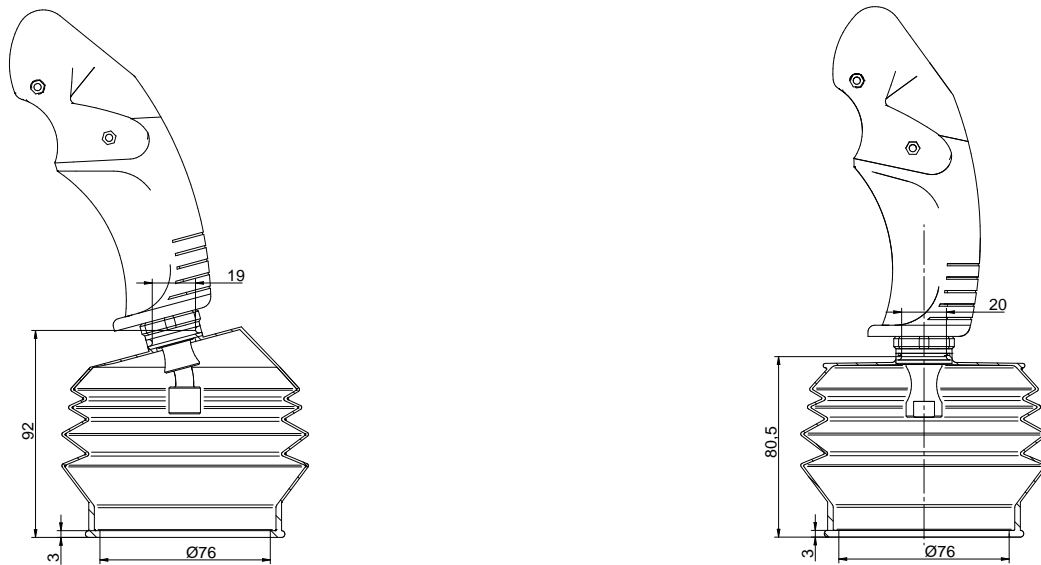
RPD - ONE RIGHT OFFSET



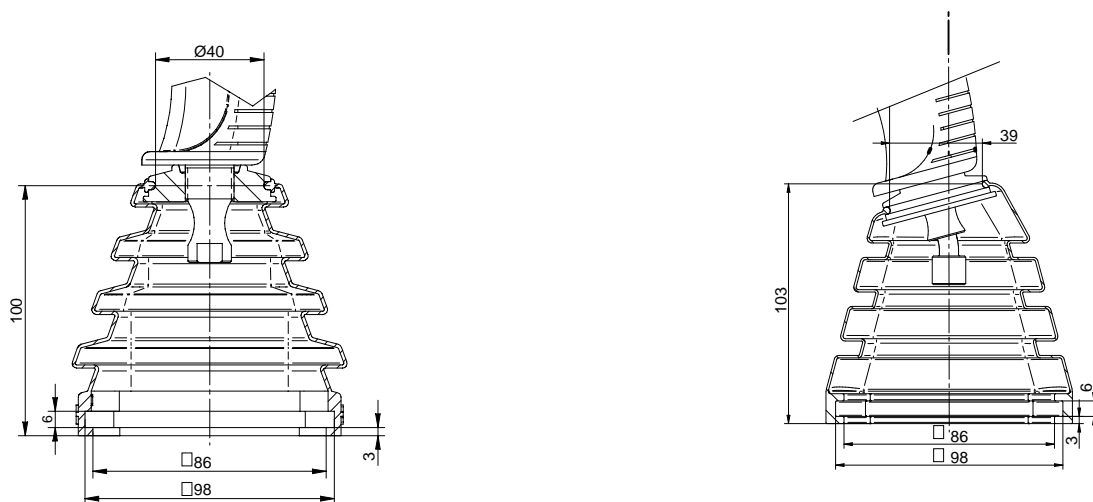
MFE



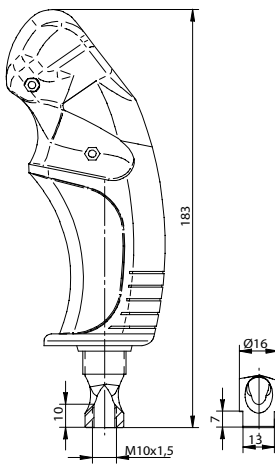
R - ROUND PROTECTION BOOT



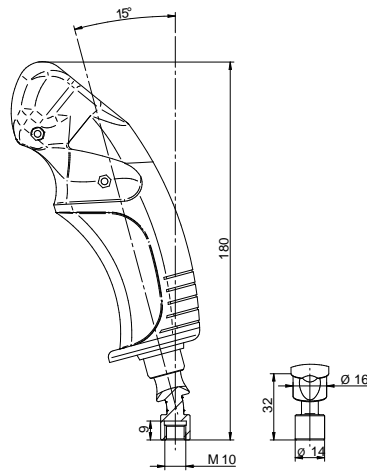
S - SQUARE PROTECTION BOOT



0 - STANDARD STRAIGHT

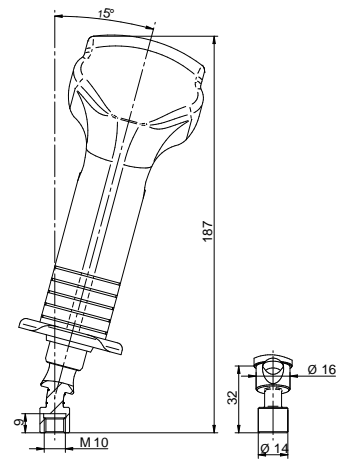


1 - TILTED 15° FORWARD



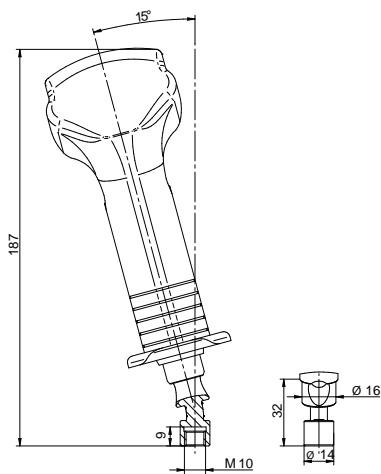
2 - TILTED 15° RIGHT

LH Handle



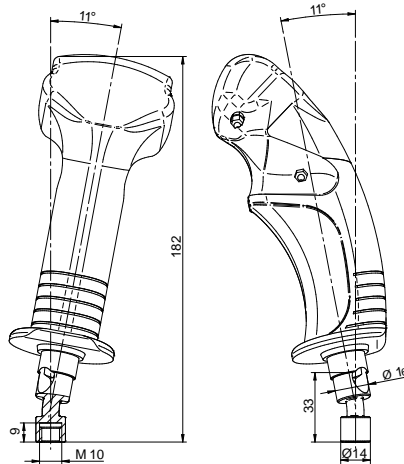
3 - TILTED 15° LEFT

RH Handle



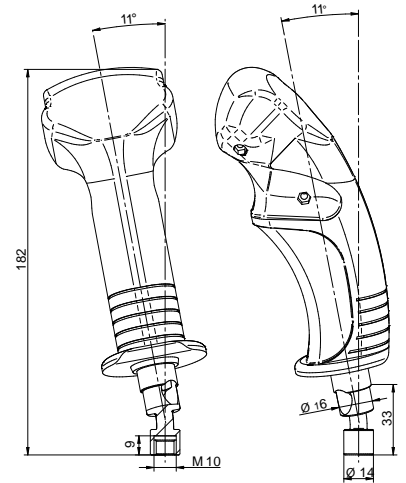
4 - COMBINED TILTED FRW & RIGHT

LH Handle

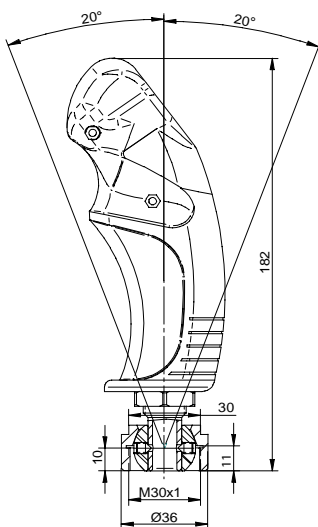


5 - COMBINED TILTED FRW & LEFT

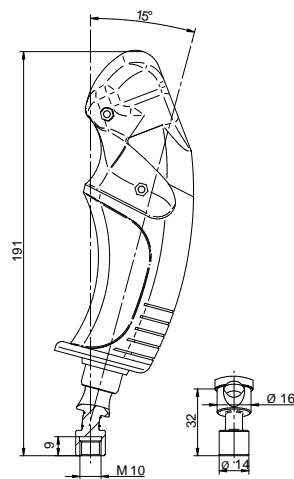
RH Handle



6 - WITH SPHERICAL JOINT



7 - TILTED 15° BACKWARD



MFE2 - MODEL CODING



Tilted Options ** See Page 13

- = Standard Straight
- S2** = Tilted 15° Right (LH handle)
- S3** = Tilted 15° Left (RH handle)

Wiring Termination

- 0** = flying leads
- 2** = with connector (to be specified on order)

Safety Trigger See Page 5

- X** = no safety trigger
- T** = standard safety trigger
- TCAP** = capacitive safety trigger

Rocker switch or Roller in position A ÷ L See Page 11

- G R1** = R1 Rocker in position G (See Page 12)
First letter=position, other 2 letters = control type.
Repeat if necessary
- RL** = Proportional roller with lever
- RP** = Proportional roller without lever
- RF** = Proportional roller frictioned without lever
- RC** = Proportional roller compact
- RW** = Proportional roller with PWM output
- R1** = Latched rocker switch 3 positions
- R2** = Latched rocker switch 2 positions
- R3** = Momentary rocker switch 3 positions

Push button / switch in position 1 ÷ 9 See Page 11

For each control selected, insert position number and ID letter chosen on the following list. Note: # = color code. **Example:** for a push button blue in position 2 and a minijoystick in position 5, type **2B 5J**

- | | |
|-------------------------------------|---------------------------------------|
| X = No button switch | Y = Yellow push button |
| B = Blue push button | A = Grey push button |
| K = Black push button | R = Red push button |
| G = Green push button | W = White push button |
| O = Orange push button | L# = Signalling led |
| #L = Latched button with led | #M = Momentary button with led |
| D = Four ways switch | J = Four ways minijoystick |
| TS = Toggle Switch | V = Purple push button |

Model

- MFE2** = Multifunction Ergonomic Handle 2

= Assigned color

Example: MULTIFUNCTION ERGONOMIC HANDLE 2, POS 1 BLUE BUTTON, POS 4 GREEN LATCHED BUTTON WITH LED, POS 5 RED PUSH BUTTON, POS 8 FOUR WAY SWITCH, POS E PROPORTIONAL ROLLER WITHOUT LEVER, STANDARD SAFETY TRIGGER, FLYING LEADS:
MFE2-1B4G5R8D-ERP-T-0

** For special configuration, please contact HANSA TMP

PUSH BUTTON TYPE C

Protection:	IP64
Rating currents:	5A@28VDC resistive load
Electrical life:	25,000 cycles
Mechanical life:	10 ⁶ cycles



PROPORTIONAL ROLLER

Supply voltage:	5 VDC
Sealing:	IP68S
Output signal:	0,5-4,5 VDC with 2,5V in neutral position
Mechanical life:	3x10 ⁶ cycles



ROCKER SWITCH

Sealing:	IP68S
Rating currents:	16A@28VDC resistive load
Mechanical life:	10 ⁵ cycles
Electrical life:	25x10 ³ cycles



FOUR WAYS SWITCH

Protection:	IP68S
Rating currents:	1A@28VDC inductive
Electrical life:	10 ⁵ cycles



SIGNALING LED

Color available:	White, Red, Yellow, Green, Blue
Supply voltage:	12 or 24 VDC
Mounted:	On panel with support



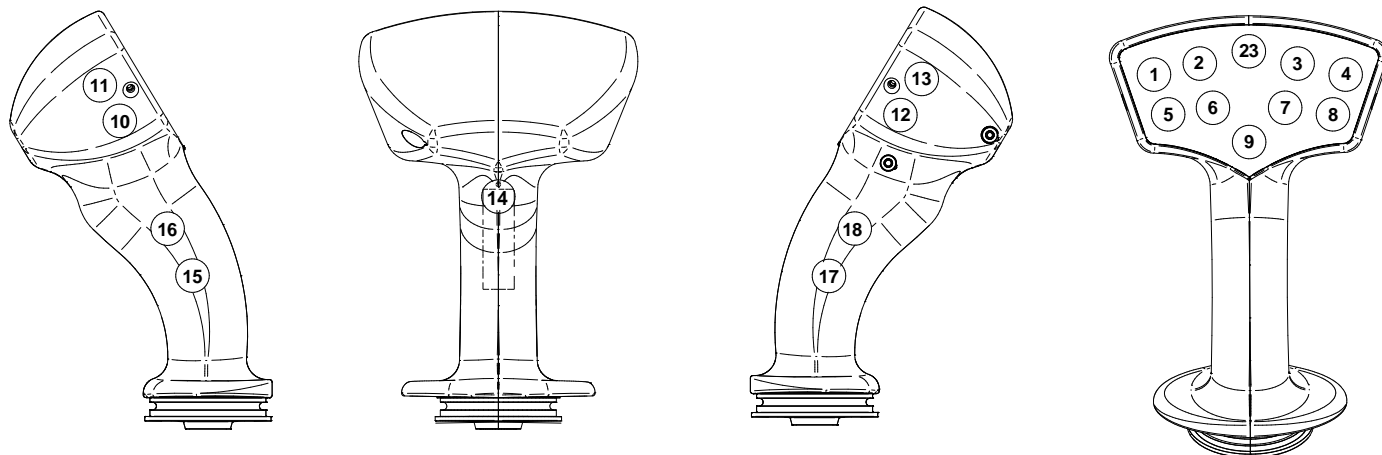
FOUR WAY PROPORTIONAL MINI-JOYSTICK

Protection:	IP68S
Supply voltage:	5 VDC
Output voltage:	0.5-4.5 V with 2.5 V in neutral, for each axis
Mechanical life:	10 ⁶ cycles



Note: Other controls available on request.

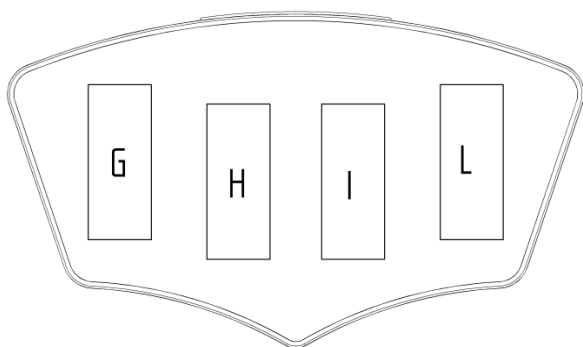
MFE2



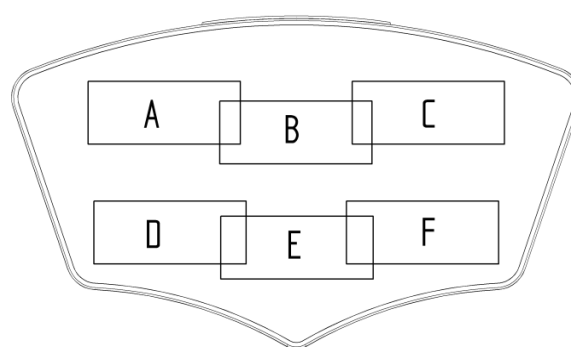
In case standard safety trigger is required, push buttons in position n.14, 15, 17, 18 cannot be added.

POSITIONS FOR CONTROLS

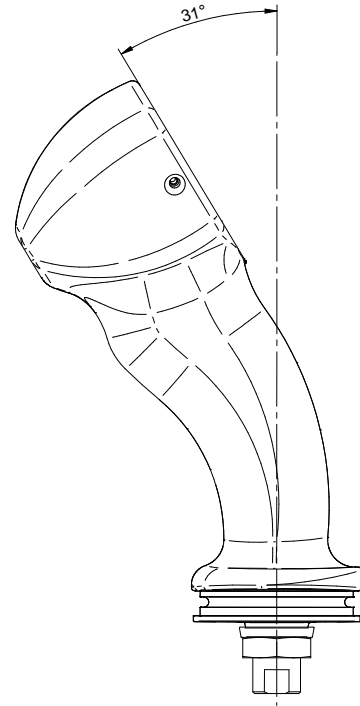
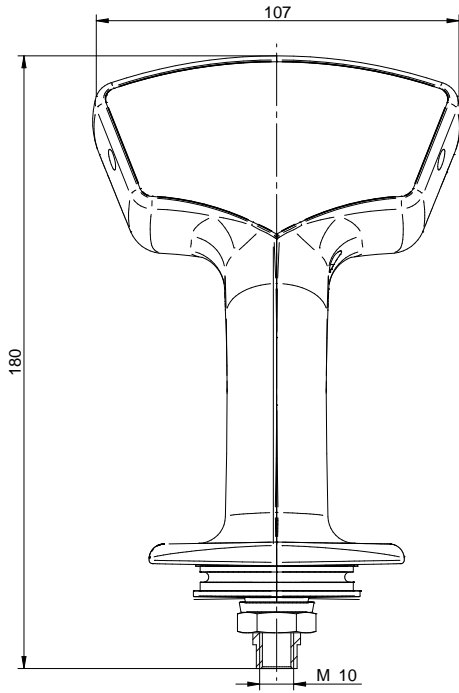
Standard positions for rocker and proportional roller, vertical mounted



Standard positions for rocker and proportional roller, horizontal mounted

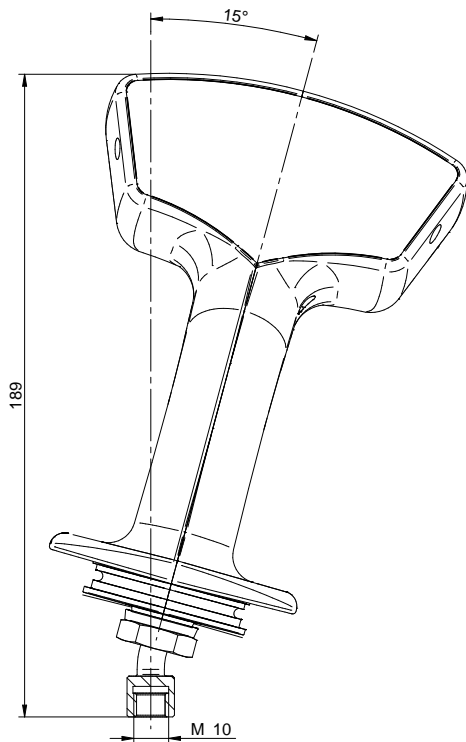


0 - STANDARD STRAIGHT



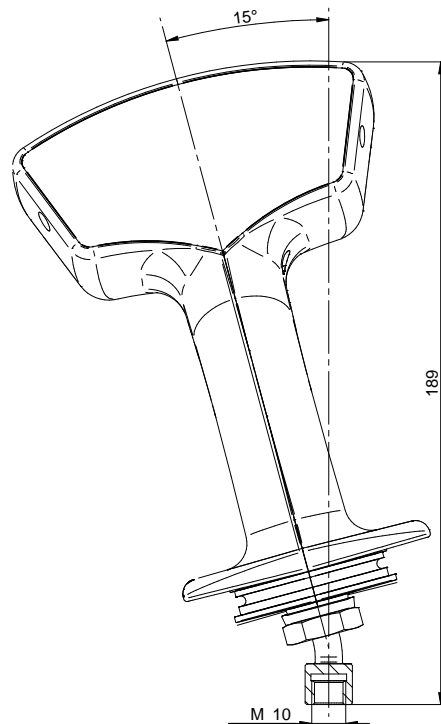
S2 - TILTED 15° RIGHT

LH Handle

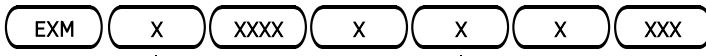


S3 - TILTED 15° LEFT

RH Handle



EXM - MODEL CODING



Rocker Switch Option * See Page 15

* Omit if not required

Tilted Option See Page 16

- 0** = Standard Straight M10x1.5
- 1** = Tilted 15° forward
- 2** = Tilted 15° right (LH handle)
- 3** = Tilted 15° left (RH handle)

Gaiter Collar

- S** = With provision for square boot

Wiring Termination

- = Standard
- 2** = With connector (maker and model number to be specified on order)

Push Button/Switch in pos. 1÷4 See Below

Insert ID letter for each button chosen on the following list and in progressive sequence from 1 up to position 4.

- X** = No button switch
- L** = Signalling led
- B** = Blue
- K** = Black (Only type C)
- G** = Green
- A** = Grey (Only type C)
- R** = Red
- V** = Purple (Only type C)
- Y** = Yellow
- O** = Orange (Only type C)
- W** = White (available only for type C and E)

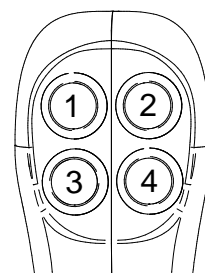
Push Button/Switch Option See Page 15

- A** = Plastic push button
- C** = Push button
- E** = Sealed push button with micro-switches

Model

- EXM** = Excavator Multifunction

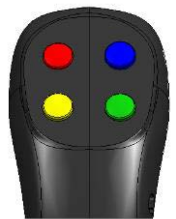
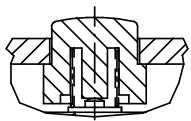
Example: EXCAVATOR MULTIFUNCTION HANDLE, PUSH BUTTON C, POS.1 BLUE BUTTON, POS.4 GREEN BUTTON, STANDARD TERMINAL, SQUARE BOOT, STANDARD STRAIGHT: **EXM-C-BXXG-S0**



Buttons Position

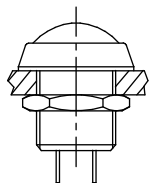
A - PLASTIC PUSH BUTTON

Protection: IP40
Rating currents: 5A@30VDC resistive load
Input voltage range: 30 VDC
Electrical life: 10⁴ cycles
Mechanical life: 2x10⁶ cycles



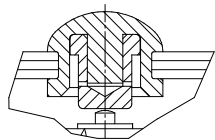
C - ISOLATED PUSH BUTTON

Protection: IP64
Rating currents: 5A@28VDC resistive load
Electrical life: 25,000 cycles
Mechanical life: 10⁶ cycles



E - SEALED SERVICEABLE PUSH BUTTON

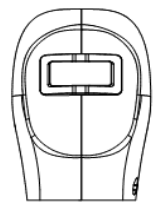
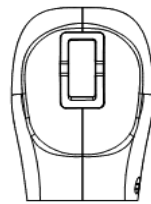
Protection: IP40
Rating currents: 5A@30VDC resistive load
Input voltage range: 30 VDC
Electrical life: 10⁴ cycles
Mechanical life: 2x10⁶ cycles



S TYPE - WATERPROOF ROCKER SWITCH

VERTICAL MOUNTED

HORIZONTAL MOUNTED



Sealing: IP68S
Rating currents: 16A@28VDC resistive load
Mechanical life: 10⁵ cycles
Electrical life: 25x10³ cycles



S1B: IP68S 3 positions momentary rocker switch
S2B: IP68S 3 positions latched rocker switch
S5B: IP68S 3 positions latched rocker switch
S3B: IP68S 3 positions latched and momentary rocker

S1A: IP68S 3 positions momentary rocker switch
S2A: IP68S 3 positions latched rocker switch
S5A: IP68S 2 positions latched rocker switch
S3A: IP68S 3 positions latched and momentary rocker

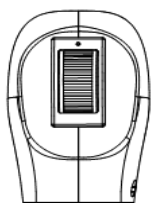
HORIZONTAL WITH TYPE C



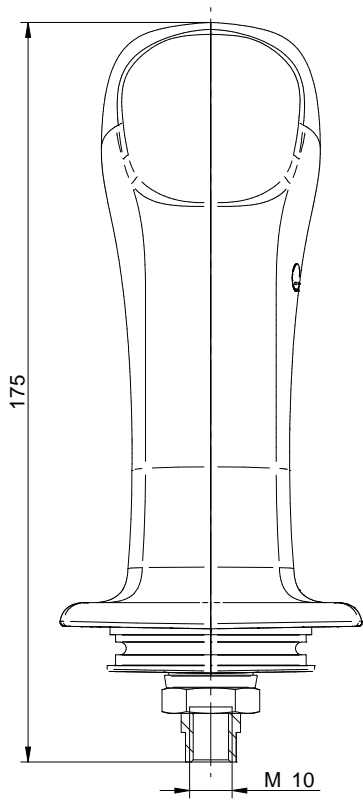
PROPORTIONAL ROLLER

VERTICAL MOUNTED

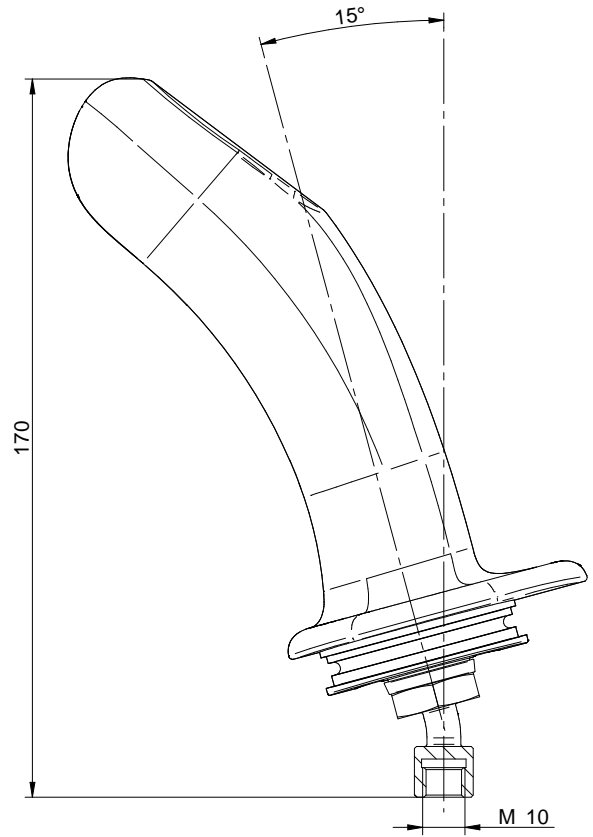
Supply voltage: 5VDC
Sealing: IP68S
Output signal: 0,4-4,5 VDC with 2,5V in neutral position
Mechanical life: 3x10⁶ cycles



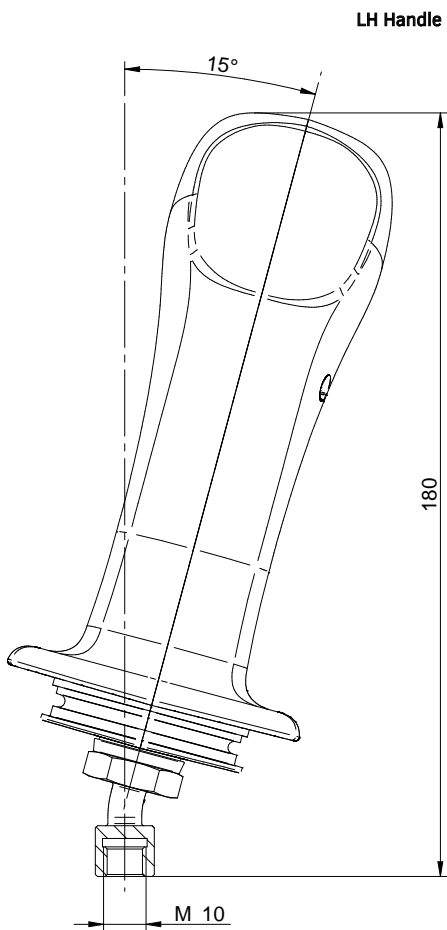
0 - STANDARD STRAIGHT



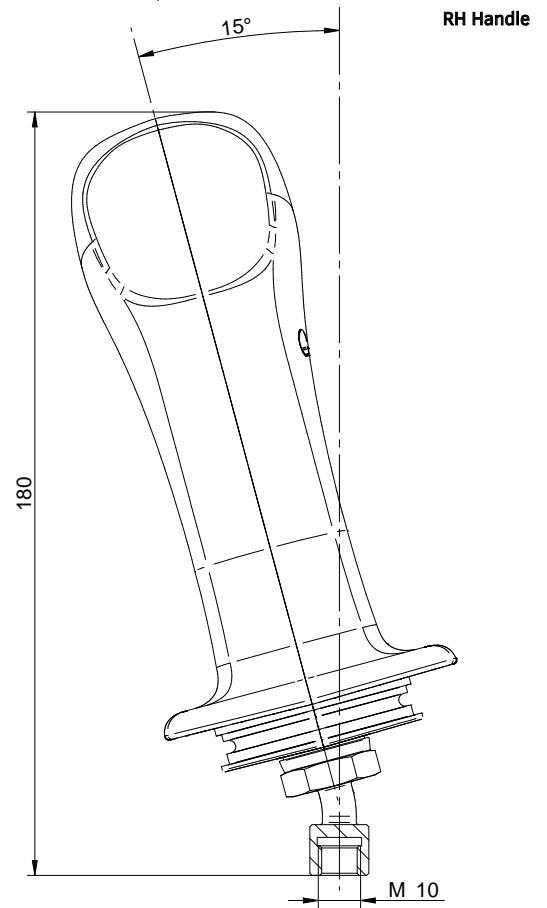
1 - TILTED 15° FORWARD



2 - TILTED 15° RIGHT



3 - TILTED 15° LEFT





HANSA-TMP S.r.l.

Via M. L. King, 6 – 41122 Modena (ITALY)

Tel.: +39 059 415 711

Fax: +39 059 415 730

E-mail: hansatmp@hansatmp.it

Website: www.hansatmp.it

Certified Company

ISO 9001:2015 – ISO 14001:2015



Share Capital: € 300.000,00

VAT Number: IT01167360369

REA Number: MO-225785