



FK

DN 40-200



VALVOLA A FARFALLA
(PVC-U, PVC-C, PP-H, PVDF, ABS)



BUTTERFLY VALVE
(PVC-U, PVC-C, PP-H, PVDF, ABS)



VANNE A PAPILLON
(PVC-U, PVC-C, PP-H, PVDF, ABS)



ABSPERRKLAPPE
(PVC-U, PVC-C, PP-H, PVDF, ABS)



INTRODUZIONE

Le presenti istruzioni devono essere lette prima dell'installazione e/o messa in servizio al fine di evitare danni a cose o pericoli alle persone.

SIMBOLI

In queste istruzioni per l'uso, vengono impiegate le seguenti illustrazioni come simboli di avvertimento e di indicazione.

INDICAZIONE

Questo simbolo segnala l'indicazione che installatore/gestore deve particolarmente osservare.

ATTENZIONE!

Questo simbolo si riferisce a operazioni e istruzioni che devono essere precisamente eseguite, al fine di evitare danni o distruzioni del dispositivo.

PERICOLO!

Questo simbolo si riferisce a operazioni e istruzioni, che devono essere precisamente eseguite, al fine di evitare pericoli alle persone.

TRASPORTO E IMMAGAZZINAMENTO

Le valvole non devono subire urti o cadute che potrebbero pregiudicare la resistenza strutturale delle parti soggette a pressione. Le valvole devono essere stoccate in ambienti con la temperatura compresa tra 0° e 50°C, e non devono essere sottoposte ad irraggiamento U.V.

AVVERTENZA

Evitare sempre brusche manovre di chiusura e proteggere la valvola da manovre accidentali. A tale scopo si consiglia di prevedere l'installazione di riduttori di manovra, fornibili su richiesta.

DICHIARAZIONE DI CONFORMITÀ

Disponibile al seguente link: https://www.oliaxis.it/website/oliaxis-it/DOWNLOAD/CERTIFICATI-FIP/PED_2014-68-UE/Declaration_PED_FIP.pdf

DATI TECNICI

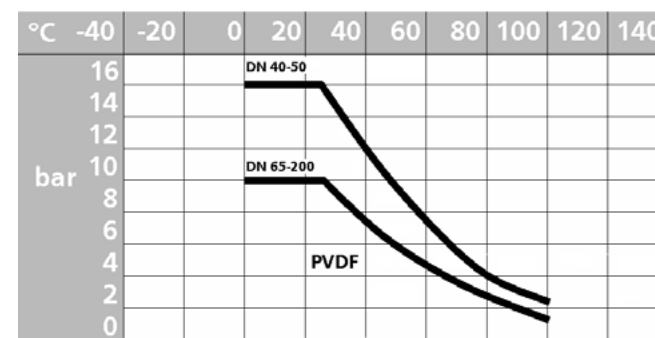
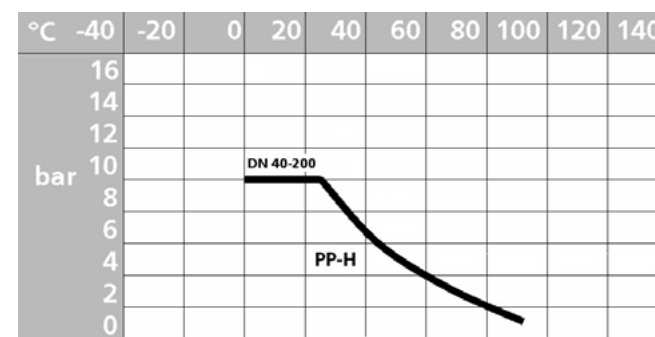
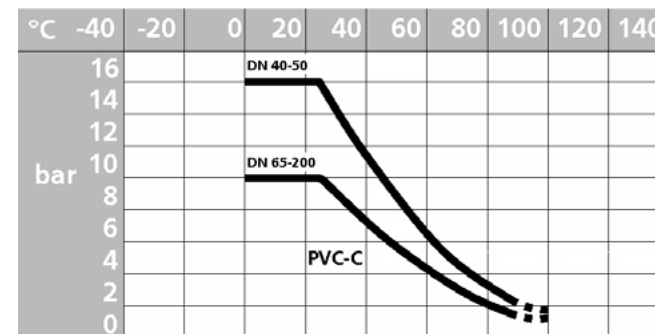
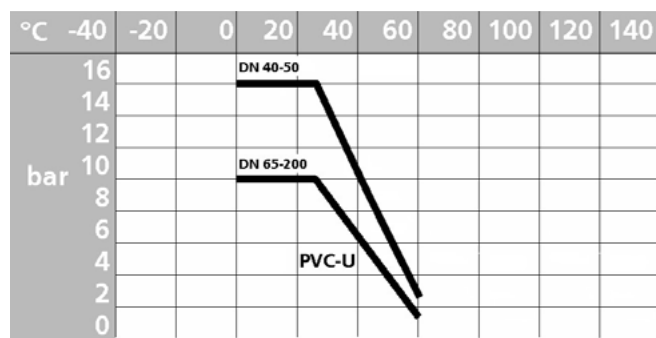
CARATTERISTICHE DEL MATERIALE

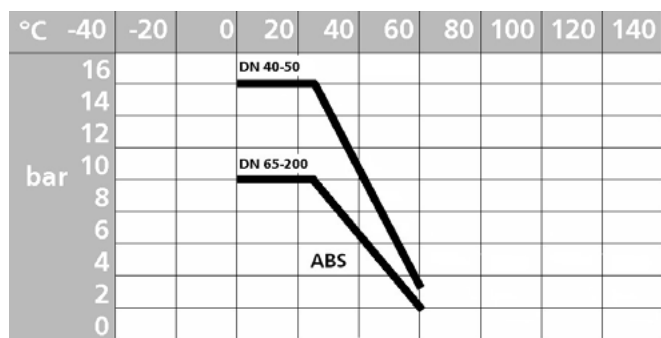
Le pressioni massime di esercizio delle valvole FIP, per il trasporto di acqua fino a 20° C, sono indicate al punto 1. Per temperature superiori a 20° C le pressioni massime di esercizio si devono ridurre come illustrato dalla curva al punto 2. FIP pubblica inoltre una guida alla resistenza chimica dei materiali termoplastici ed elastomerici all'interno proprio sito internet (www.oliaxis.it): essa riporta il campo di utilizzo delle valvole FIP (corpo e guarnizioni) per il trasporto dei prodotti chimici.

1 PRESSIONE MASSIMA DI ESERCIZIO A 20° C

	(mm)	d50	d63	d75	d90	d110	d140	d160	d225
Size	(mm)	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200
PVC-U	(bar)	16	16	10	10	10	10	10	10
PP-H	(bar)	10	10	10	10	10	10	10	10
PVC-C	(bar)	16	16	10	10	10	10	10	10
PVDF	(bar)	16	16	10	10	10	10	10	10
ABS	(bar)	16	16	10	10	10	10	10	10

2 VARIAZIONE DELLA PRESSIONE IN FUNZIONE DELLA TEMPERATURA





! Per l'impiego del PVC-C con temperature di esercizio superiori a 90°, si consiglia di contattare il servizio.

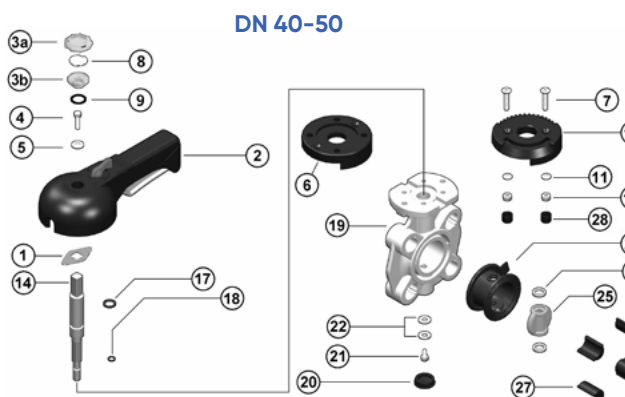
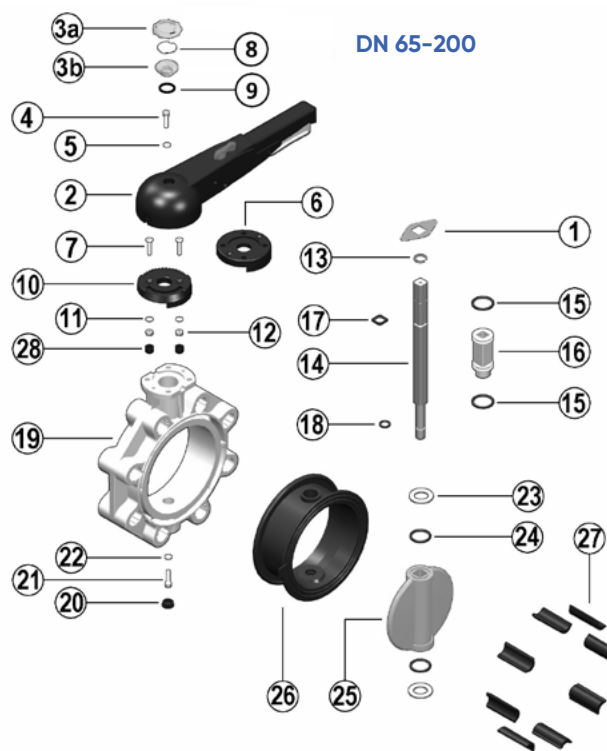
3 TEMPERATURA DI ESERCIZIO (°C)

	T min. (°C)	T max. (°C)
PVC-U	0	60
PVC-C	0	100
PP-H	0	100
PVDF	0	100
ABS	0	60

4 COEFFICIENTE DI FLUSSO Kv100

Per coefficiente di flusso kv100 si intende la portata Q in litri al minuto di acqua a 20°C che genera una perdita di carico $\Delta p = 1$ bar per una determinata apertura della valvola. I valori riportati nelle tabelle si riferiscono a valvola completamente aperta.

D	d50	d63	d75	d90	d110	d140	d160	d225
DN	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200
Kv100 l/min	1000	1285	1700	3550	5900	9850	18700	30500



Pos	Componenti	Materiale	n°
1	Indicatore posizione	ABS	1
2	Maniglia	PVC	1
3	Tappo superiore	PVC	1
3b	Tappo inferiore	PVC	1
4	Vite	Acciaio inox	1
5	Rondella	Acciaio inox	1
6	Flangetta	PP-GR	1
7	Vite	Acciaio inox	2
8	Porta etichette	NBR	1
9	O-Ring tappo	PVC	1
10	Piattello	PP-GR	1
11	Rondella	Acciaio inox	2
12	Dado	Acciaio inox	2
13	Anello Seeger	Acciaio inox	1
14	Stelo	Acciaio inox	1
15	O-Ring bussola	EPDM o FKM	2
16	Bussola	Nylon	1
17	O-Ring stelo	EPDM o FKM	1
18	O-Ring stelo	EPDM o FKM	1
19	Corpo	PP-GR	1
20	Tappo di protezione	PE	1
21	Vite	Acciaio inox	1
22	Rondella	Acciaio inox	1
23	Anello antifrizione	PTFE	2
24	O-Ring disco	EPDM o FKM	2
25	Disco	PVC, PP, PVCC, ABS, PVDF	1
26	Guarnizione primaria	EPDM, FKM, NBR	1
27	Lunette	ABS	8
28	Tappo di protezione	PE	2

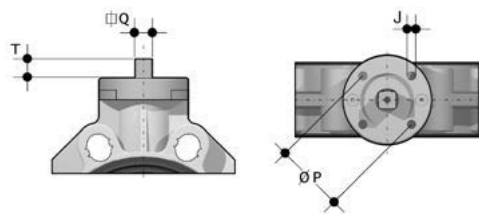
5 COPPIA DI MANOVRA ALLA MASSIMA PRESSIONE

Nm	d50 DN40	d63 DN50	d75 DN65	d90 DN80	d110 DN100	d140 DN125	d160 DN150	d225 DN200
150								
125								
100								
75								
50								
25								
0								

6 AUTOMATISMI

La valvola può essere fornita, a richiesta, completa di servocomandi. Esiste comunque la possibilità di applicare direttamente attuatori pneumatici, elettrici standard e riduttori a volantino per operazioni gravose, grazie alla torretta in riproduzione la dima di foratura prevista dalla norma ISO 5211, F05, F07 e F10.

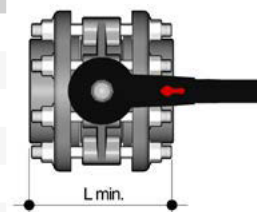
d	DN	J	P	T	Q
50	40	7	50	F 05	12
63	50	7	50	F 05	12
75	65	7	50/70	F 05/F 07	12
90	80	9	70	F 07	16
110	100	9	70	F 07	16
140	125	9	70	F 07	19
160	150	9	70	F 07	19
225	200	11	102	F 10	24



7 DIMENSIONI DEI BULLONI DA UTILIZZARE NELL'INSTALLAZIONE

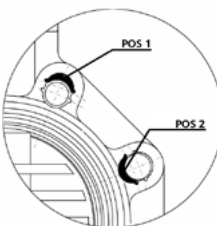
Coppia di serraggio per ottenere la tenuta in prova idraulica (1,5 x PN a 20° C) (bulloneria nuova o lubrificata).

d	DN	L min	*Nm
50	40	M16x150	10
63	50	M16x150	13
75	65	M16x170	15
90	80	M16x180	18
110	100	M16x180	20
140	125	M16x210	35
160	150	M20x240	40
225	200	M20x260	55



8 POSIZIONAMENTO DELLE LUNETTE

	Serie 1	Serie 2	Serie 3	Serie 4	Serie 5
d 50 DN 40	Pos.1	Pos.2	Pos.1	Pos.1	Pos.1
d 63 DN 50	Pos.1	Pos.2	Pos.1	-	-
d 75 DN 65	Pos.1	Pos.2	Pos.1	Pos.2	Pos.1
d 90 DN 80	Pos.1	Pos.2	Pos.1	Pos.2	Pos.1
d 110 DN 100	Pos.1	Pos.2	Pos.1	Pos.2	Pos.1
d 140 DN 125	Pos.1	Pos.2	Pos.1	Pos.2	Pos.1
d 160 DN 150	Pos.1	Pos.2	Pos.1	Pos.2	Pos.1
d 225 DN 200	Pos.1	PN10	Pos.2	Pos.2	Pos.1



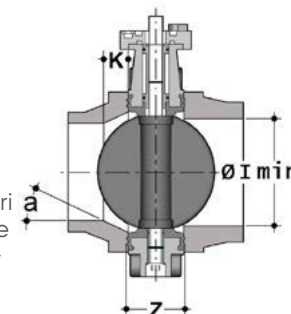
Series 1: ISO 9624 PN6, DIN 2501 PN6, EN 1092-1/2 PN6, DIN 8063-4 PN6
 Series 2: ISO 9624 PN10/16, DIN 2501 PN10/16, EN 1092-1/2 PN10/16, DIN 8063-4 PN10/16
 Series 3: BS 10 Table A-D-E Spec. D-E
 Series 4: ASME B16.5 class 150, BS EN 1759-1 class 150
 Series 5: JIS B2220

INSTALLAZIONE SULL'IMPIANTO

A CODICI DEI COLLARI FIP

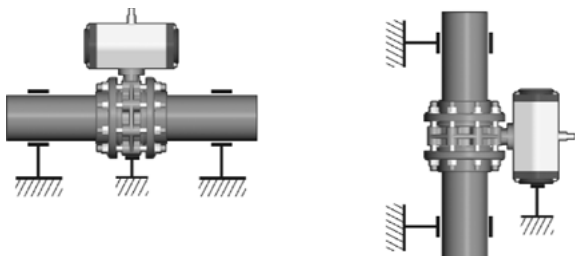
VALVE	PIPE	PVC-U PN16	PP-H PN6 SDR 17,6 - S8,3	PP-H PN10 SDR 11 - S5
50	50	QPV050	QBM17050	QBM11050
63	63	QPV063	QBM17063	QBM11063
75	75	QPV075	QBM17075	QBM11075
90	90	QPV090	QBM17090	QBM11090
110	110	QPV110	QBM17110	QBM11110
140	125	QPV125FKE	QBM17125	QBM11125
140	140	QPV140	QBM17140	QBM11140
160	160	QPV160	QBM17160	QBM11160
160	180	QPV180	QBM17180	QBM11180
225	200	QPV200FKE	QBM17FK200	QBM11FK200
225	225	QVR225	QBM17225	QBM11FK225

Prima di effettuare l'installazione della valvola è opportuno verificare che il diametro di passaggio del collare (l min) consenta la corretta apertura del disco. Per l'installazione si consiglia di utilizzare i collari FIP (Tab.A) oppure verificare gli accoppiamenti valvola-collare-flangia e smussare secondo quote K - a ove necessario.

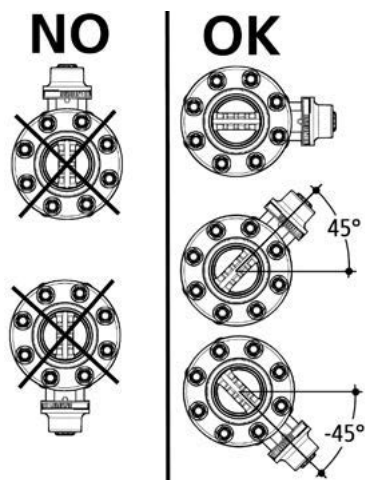


VALVE	PIPE			PP-PE SDR 17,6 - S8,3		PP-PE SDR 11 - S5	
d	d	l min.	Z	K	a	K	a
50	50	25	33	-	-	-	-
63	63	28	43	-	-	-	-
75	75	47	46	-	-	-	-
90	90	64	49	-	-	-	-
110	110	84	56	-	-	-	-
140	125	108	64	-	-	-	-
140	140	108	64	-	-	-	-
160	160	134	70	-	-	26,5	20°
160	180	134	70	-	-	-	-
225	200	187	71	35	20°	35	25°
225	225	187	71	-	-	40	15°

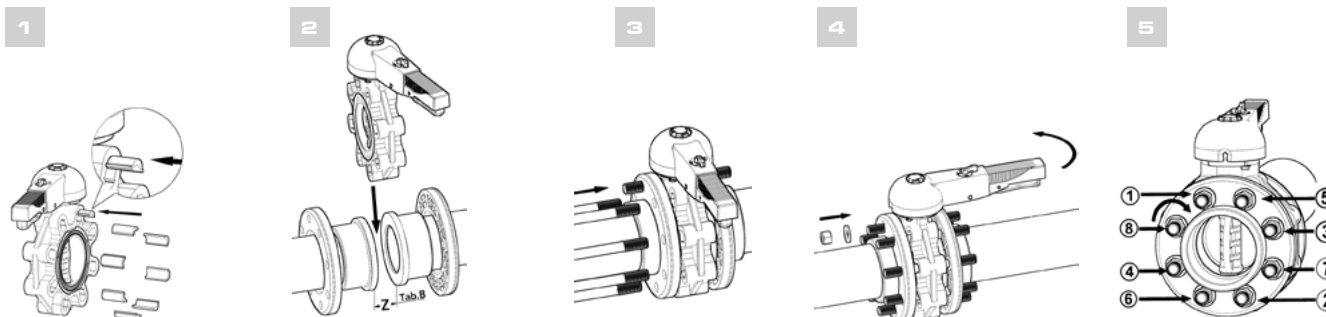
C Le valvole motorizzate devono essere adeguatamente supportate.



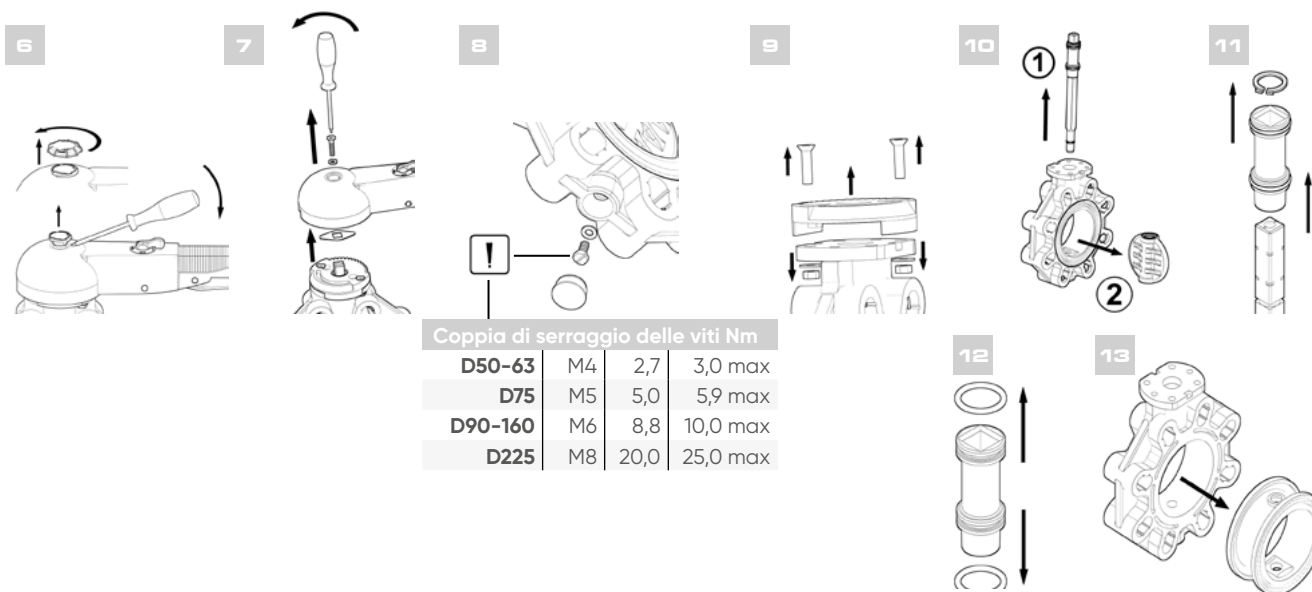
D Convogliamento fluidi non puliti, o con sedimento.



MOMENTO DI SERRAGGIO
I **Installazione:** 1-2-3-4-5
Disinstallazione: 5-4-3-2-1



! **ASSIEMAGGIO**
Smontaggio: 6-7-8-9-10-11-12-13
Montaggio: 13-12-11-10-9-8-7-6
 Lubrificare la guarnizione

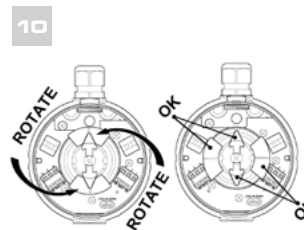
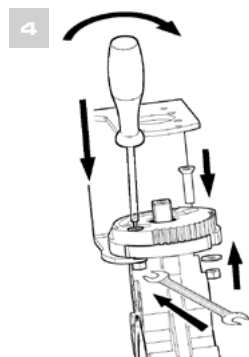
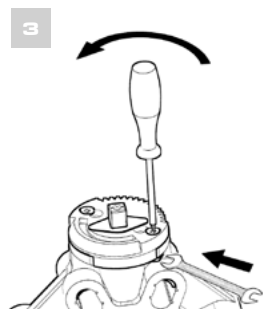
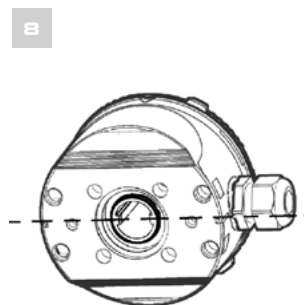
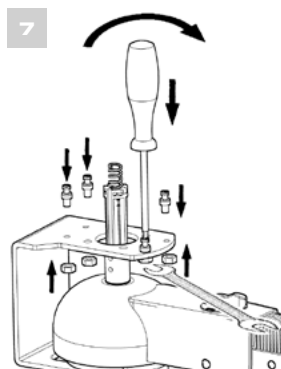
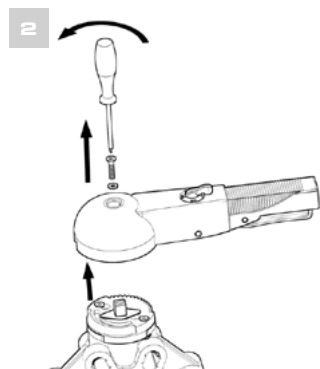
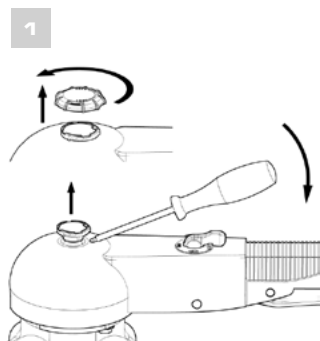
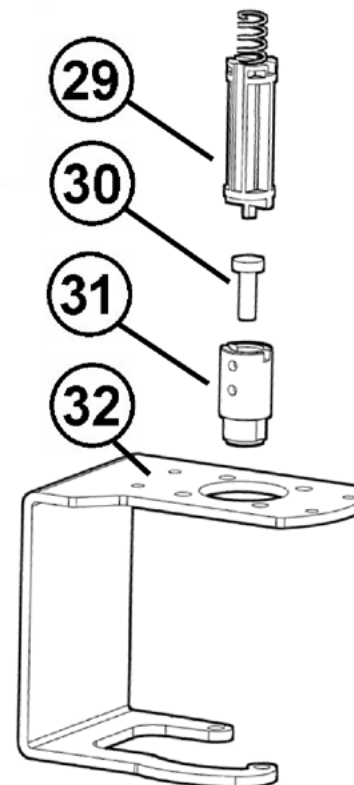
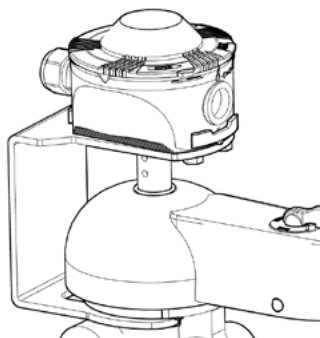


Coppia di serraggio delle viti Nm

D50-63	M4	2,7	3,0 max
D75	M5	5,0	5,9 max
D90-160	M6	8,8	10,0 max
D225	M8	20,0	25,0 max

ACCESSORI

KIT LSQT



Pos	Componenti	Materiale	n°
29	Modulo con molla	PP/Acciaio inox	1
30	Vite (D50-63 KIT)	Acciaio inox	1
30	Vite (D75-225)	Acciaio inox	*
31	Modulo di collegamento	Acciaio inox	1
32	Staffa	Acciaio inox	1

*Dalla maniglia della valvola

INTRODUZIONE

Le presenti istruzioni devono essere lette prima dell'installazione e/o messa in servizio al fine di evitare danni a cose o pericoli alle persone.

SIMBOLI

In queste istruzioni per l'uso, vengono impiegate le seguenti illustrazioni come simboli di avvertimento e di indicazione:

INDICAZIONE

 Questo simbolo segnala l'indicazione che installatore/gestore deve particolarmente osservare.

ATTENZIONE!

 Questo simbolo si riferisce a operazioni e istruzioni che devono essere precisamente eseguite, al fine di evitare danni o distruzioni del dispositivo.

PERICOLO!

 Questo simbolo si riferisce a operazioni e istruzioni, che devono essere precisamente eseguite, al fine di evitare pericoli alle persone.

TRASPORTO E IMMAGAZZINAMENTO

Il box non deve subire urti o cadute che potrebbero pregiudicare la resistenza strutturale delle parti. Il box deve essere stoccato in ambienti con la temperatura compresa tra -10 °C e 50 °C, e non deve essere sottoposto ad irraggiamento U. V.

DICHIARAZIONE DI CONFORMITÀ

Disponibile al seguente link: https://www.oalixaxis.it/website/oalixaxis-it/DOWNLOAD/CERTIFICATI-FIP/PED_2014-68-UE/Declaration_PED_FIP.pdf

LSQT - BOX DI FINE CORSA ¼ DI GIRO



AVVERTENZE

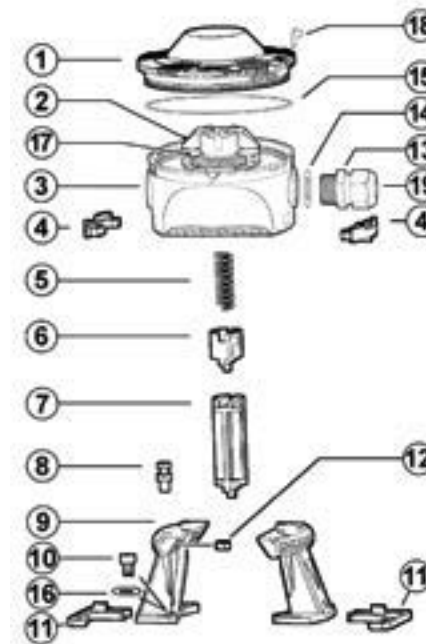
PRIMA DI INSTALLARE IL BOX LEGGERE LE PRESENTI ISTRUZIONI

 Per evitare il ferimento, la morte o danni importanti ad oggetti, leggere e seguire le istruzioni di sicurezza presenti in questo manuale

 **TENSIONE PERICOLOSA**
Scollegare l'alimentazione elettrica prima di operare sull'apparecchiatura.

 **ATTENZIONE! NON RIMUOVERE IL COPERCHIO QUANDO L'APPARECCHIO È SOTTO TENSIONE**

Non superare le limitazioni di utilizzo degli switch. Il superamento dei limiti può causare danni all'apparecchio. Il grado di protezione, dipende dal pressacavo e dal metodo di cabaggio usato. Limit awitch box per uso su valvola a quarto di giro (90° di rotazione). Seguire la seguente procedura prima di mettere in servizio l'LSQT.



Pos.	Componenti	n°
1	Coperchio (Policarbonato)	1
2	Camme (POM nero)	2
3	Corpo (PP GF30% nero)	1
4	Clip di fissaggio (ABS nero)	2
5	Molla (Acciaio INOX)	1
6	Modulo di collegamento (PA66 GF30% nero)	1
7	Prolunga modulo (PA66 GF30% nero)	1
8	Perni di fissaggio (Acciaio INOX)	4
9	Staffa (PA66 GF30% nero)	2
10	Vite M5 (Acciaio INOX)	4
11	Prolunga staffa 130x30 (PA66 GF30% nero)	2
12	Dado M5 (Acciaio INOX)	4
13	Pressacavo (PA6)	1
14	O-ring pressacavo (EPDM)	1
15	O-ring coperchio (EPDM)	1
16	Rondella M5 (Acciaio INOX)	4
17	Indicatori (POM giallo)	3
18	Blocco di sicurezza (ABS nero)	1
19	Ghiera (PA6)	1

Il materiale del componente è indicato tra parentesi

INSTALLAZIONE DIRETTA

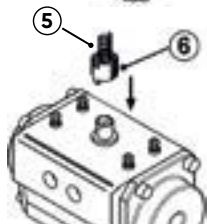
Namur pattern 80x30, h: 20-30 mm, D ≤ 18 mm

Conforme alle disposizioni VDI/VDE3845

- 1** Avvitare, serrando fortemente fino alla battuta i quattro perni di blocco **(8)**



- 2** Posizionare il modulo **(6)** e la molla **(5)** sullo stelo dell'attuatore



- 3** Allineare il pignone **(22)** al modulo **(6)** posizionato sull'attuatore



- 4a** Montare il box **(3)** sopra l'attuatore



- 4b** Accertarsi di portarlo fino alla battuta



- 5** Fissare il box ingaggiando le clips **(4)** sui perni di blocco fino a sentire un "click" che indica il corretto aggancio

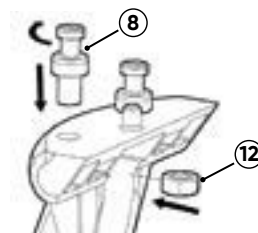


INSTALLAZIONE CON STAFFA

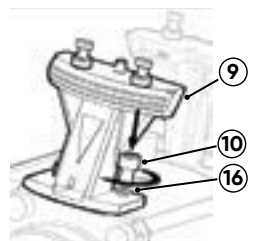
Namur pattern 80x30, h: 20-30 mm, D > 18 mm

Conforme alle disposizioni VDI/VDE3845

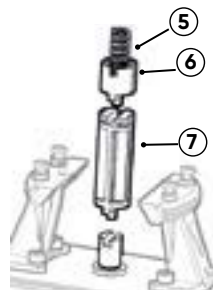
- 1** Inserire i 4 dadi **(12)** nelle rispettive sedi della staffa, avvitare, serrando fortemente fino alla battuta i quattro perni di blocco **(8)**



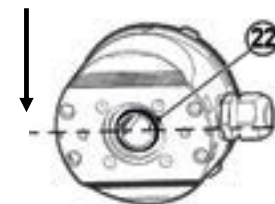
- 2** Fissare le due staffe **(9)** sopra l'attuatore utilizzando le quattro viti **(10)** e le quattro rondelle **(16)**



- 3** Posizionare modulo **(6)**, la molla **(5)** più prolunga **(7)** sullo stelo dell'attuatore



- 4** Allineare il pignone **(22)** al modulo **(6)** posizionato sull'attuatore



- 5** Montare il box sopra le staffe, accertandosi di portarlo fino a battuta



- 6** Fissare il box ingaggiando le clips sui perni di blocco **(4)** fino a sentire un "click" che indica il corretto aggancio

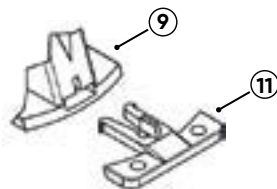


INSTALLAZIONE CON STAFFA.

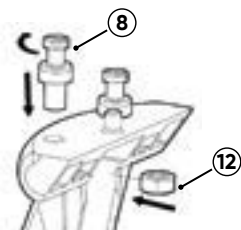
Namur pattern 130x30

Conforme alle disposizioni VDI/VDE3845

- 1** Inserire le estensioni (11) sulle staffe (9)



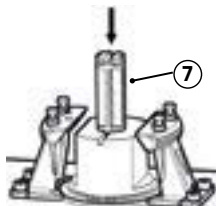
- 2** Inserire i quattro dadi (12) nelle rispettive sedi della staffa, avvitare serrando fortemente fino alla battuta i quattro perni di blocco (8)



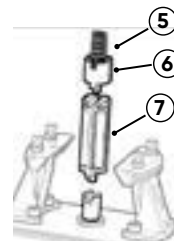
- 3** Fissare le due staffe (9) sopra l'attuatore utilizzando le quattro viti (10) e le quattro rondelle (16)



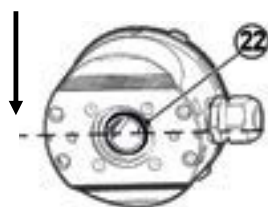
- 4a** Altezza stelo 50 mm. Posizionare la sola prolunga sullo stelo (7) dell'attuatore



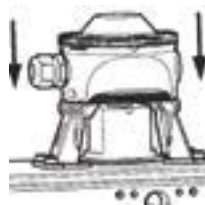
- 4b** Altezza stelo ≤ 30 mm. Posizionare modulo (6) e la molla (5) più prolunga (7) sullo stelo dell'attuatore



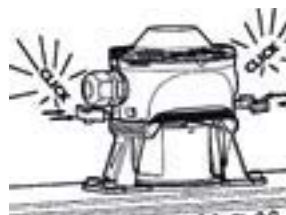
- 5** Allineare il pignone (22) al modulo (6) posizionato sull'attuatore



- 6** Montare il box sopra le staffe, accertandosi di portarlo fino a battuta



- 7** Fissare il box ingaggiando le clips sui perni di blocco (4) fino a sentire un "click" che indica il corretto aggancio



CABLAGGIO ELETTRICO - TENSIONE PERICOLOSA

Scollegare l'alimentazione elettrica prima di operare sull'apparecchiatura.

Controllare il corretto serraggio del pressacava (13)

Rimuovere la ghiera (19) sul cavo elettrico, quindi far passare i fili attraverso il pressacavo (13).

Collegare i fili ai morsetti (A) secondo quanto riportato nello schema elettrico, vedi schema su etichetta.

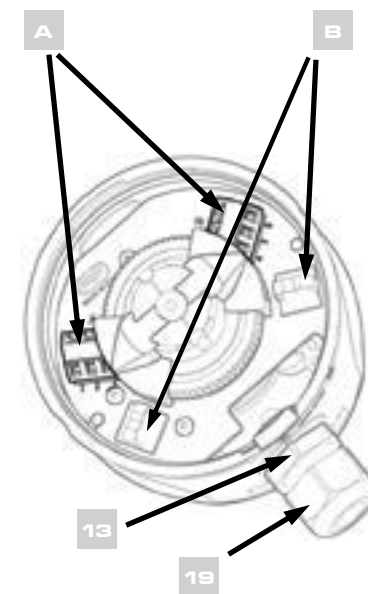
Serrare le viti dei morsetti (A) usando un cacciavite.

Raccogliere i fili dentro le due clips (B).

Serrare fortemente la ghiera (19).

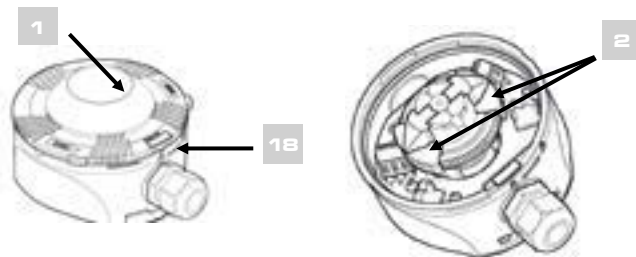
Rimontare il coperchio (1) ruotando in senso orario fino allo scontro.

Abbassare il blocco di sicurezza (18).



TARATURA DEI MICROSWITCH E ALLINEAMENTO INDICATORI

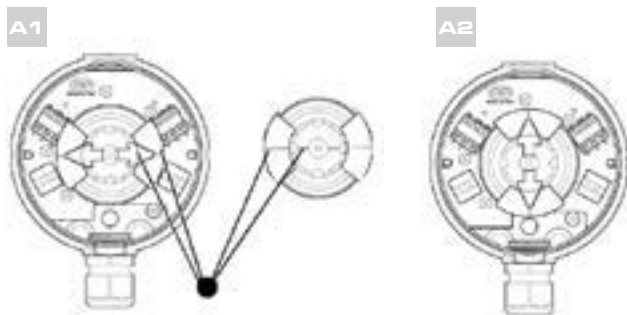
Sollevare il blocco di sicurezza (18) e ruotare in senso antiorario il coperchio (1) quindi rimuoverlo, se necessario, allineare secondo schemi A, B, C.



A 2 VIE NORMALMENTE CHIUSA (SENSO ANTIORARIO APERTURA)

A1) Posizione normalmente chiusa, allineare camme, pignone, indicatori, switch "A" impegnato.

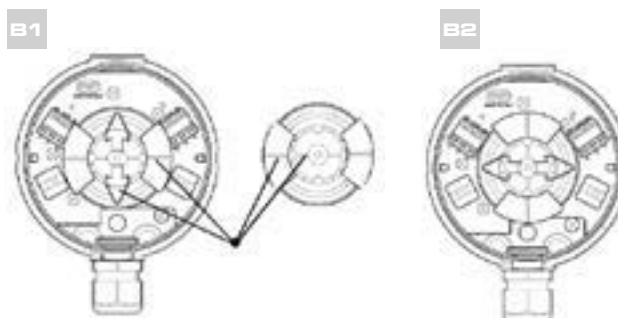
A2) Posizione alimentata, valvola aperta, switch "B" impegnato.



B 2 VIE NORMALMENTE APERTA (SENSO ANTIORARIO CHIUSURA)

B1) Posizione normalmente aperta, allineare camme e pignone, indicatori a 90° rispetto alle camme, switch "A" impegnato.

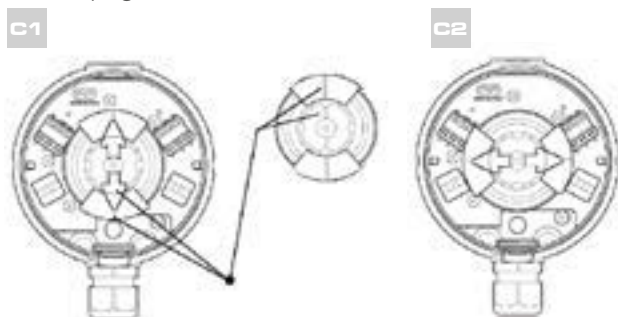
B2) Posizione alimentata, valvola chiusa, switch "B" impegnato.



C 2 VIE NORMALMENTE APERTA (SENSO ORARIO CHIUSURA)

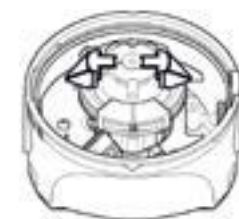
C1) Posizione normalmente aperta, allineare camme, pignone e indicatori a 90, switch "B" impegnato.

C2) Posizione alimentata, valvola chiusa, switch "A" impegnato.

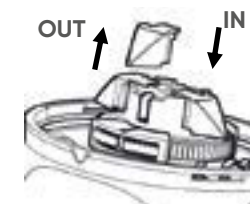


CONFIGURAZIONE DEGLI INDICATORI DI POSIZIONE PER VALVOLE A 2 VIE O 3 VIE

2 WAYS



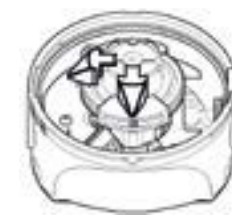
CHANGE



3 WAYS (T-type)



2 WAYS (L-type)



LABELLING SYSTEM - MANIGLIE PERSONALIZZABILI



La piastrina, inserita all'interno del tappo, può essere rimossa e, una volta capovolta, utilizzata per essere personalizzata direttamente o tramite applicazione di etichette stampate in precedenza con il software EASYFIT Labelling System. Per applicare l'etichetta alla valvola, procedere come segue.

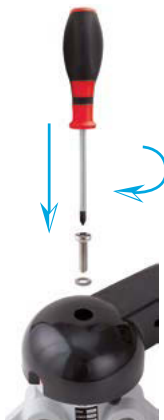
1



2



1



2



RAEE

Rifiuti di apparecchiature elettriche ed elettroniche.



Questo prodotto rientra nel campo di applicazione della Direttiva 2012/19/UE riguardante la gestione dei rifiuti di apparecchiature elettriche ed elettroniche (RAEE).

L'apparecchio non deve essere eliminato con gli scarti domestici in quanto composto da diversi materiali che possono essere riciclati presso le strutture adeguate. Informarsi attraverso l'autorità comunale per quanto riguarda l'ubicazione delle piattaforme ecologiche atte a ricevere il prodotto per lo smaltimento ed il suo successivo corretto riciclaggio.

Si ricorda, inoltre, che a fronte di acquisto di apparecchio equivalente, il distributore è tenuto al ritiro gratuito del prodotto da smaltire.

Il prodotto non è potenzialmente pericoloso per la salute umana e l'ambiente, non contenendo sostanze dannose come da Direttiva 2011/65/UE (RoHS), ma se abbandonato nell'ambiente impatta negativamente sull'ecosistema.

Leggere attentamente le istruzioni prima di utilizzare l'apparecchio per la prima volta. Si raccomanda di non usare assolutamente il prodotto per un uso diverso da quello a cui è stato destinato, essendoci pericolo di shock elettrico se usato impropriamente.

Il simbolo del bidone barrato, presente sull'etichetta, indica la rispondenza di tale prodotto alla normativa relativa ai rifiuti di apparecchiature elettriche ed elettroniche. L'abbandono nell'ambiente dell'apparecchiatura o lo smaltimento abusivo della stessa sono puniti dalla legge.



INTRODUCTION

This Instruction manual should be read before the installation and / or put into service in order to avoid damage to property or danger to people.

SYMBOLS

The following illustrations are used throughout this manual to highlight where an instruction must be followed.

INDICATION



This symbol highlights a process that the installer / operator must follow carefully.

WARNING!



This symbol refers to the operations and instructions which must be precisely followed in order to avoid damage or destruction of the device.

DANGER!



This symbol refers to the operations and instructions which must be precisely followed in order to avoid danger to people.

TRANSPORT AND STORAGE

The valves should not undergo impacts nor falls that could affect the structural strength of the pressurized parts. The valves must be stored in areas with temperatures from 0° e 50°C, and should not be exposed to U.V. radiation.

WARNING



It is important to avoid rapid closure of valves to eliminate the possibility of water hammer causing damage to the pipeline. For this purpose it is recommended to install manual gearbox, available on request.

DECLARATION OF CONFORMITY

Available at the following link: https://www.oliaxis.it/website/oliaxis-it/DOWNLOAD/CERTIFICATI-FIP/PED_2014-68-UE/Declaration_PED_FIP.pdf

TECHNICAL DATA

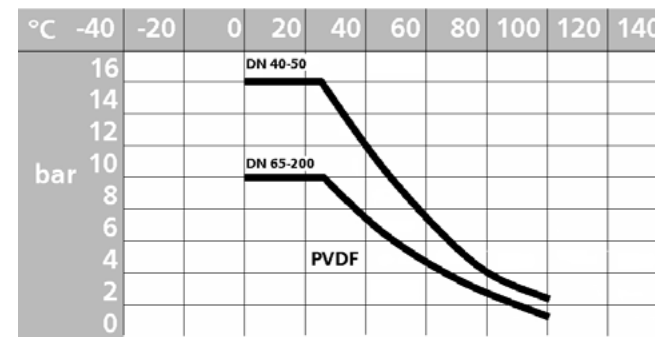
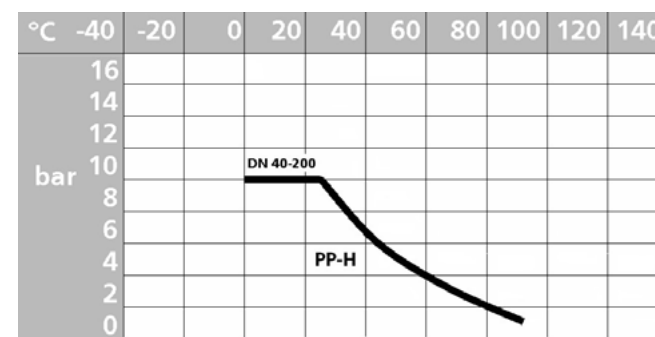
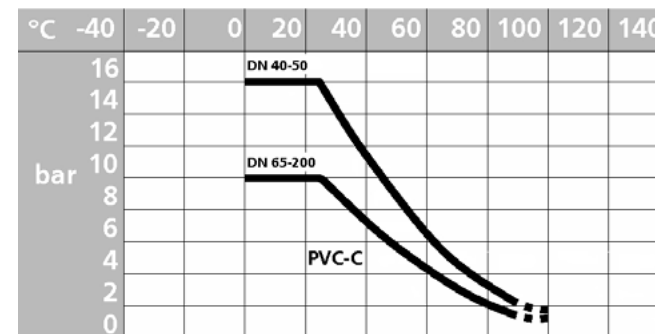
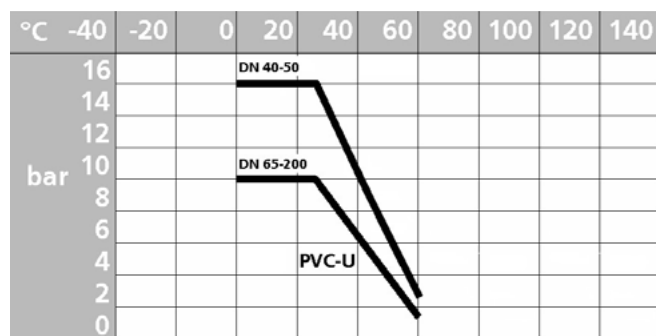
MATERIAL INFORMATION

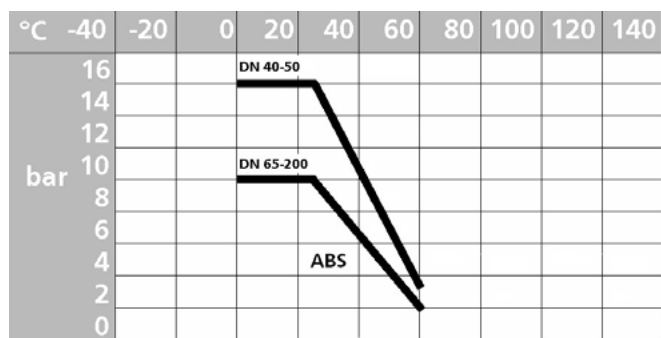
FIP valves are rated for a working pressure at 20° C, listed on fig.1. For service temperature above 20° C working pressure should be reduced according to the curve shown in fig. 2. FIP is also providing on its web-site (www.oliaxis.it) a guide to chemical resistance of thermoplastics and elastomers; the guide describes the fields of application for FIP valves (body and gaskets) in the conveyance of chemicals.

1 MAXIMUM WORKING PRESSURE AT 20° C

	(mm)	d50	d63	d75	d90	d110	d140	d160	d225
Size	(mm)	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200
PVC-U	(bar)	16	16	10	10	10	10	10	10
PP-H	(bar)	10	10	10	10	10	10	10	10
PVC-C	(bar)	16	16	10	10	10	10	10	10
PVDF	(bar)	16	16	10	10	10	10	10	10
ABS	(bar)	16	16	10	10	10	10	10	10

2 PRESSURE/TEMPERATURE RATING





! For PVC-C usage with working temperature higher than 90° C please contact the technical service.

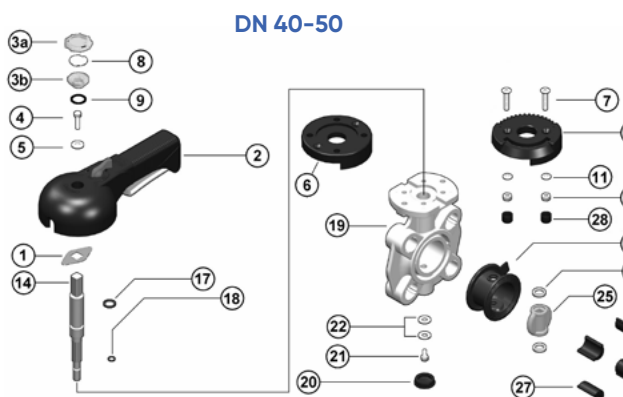
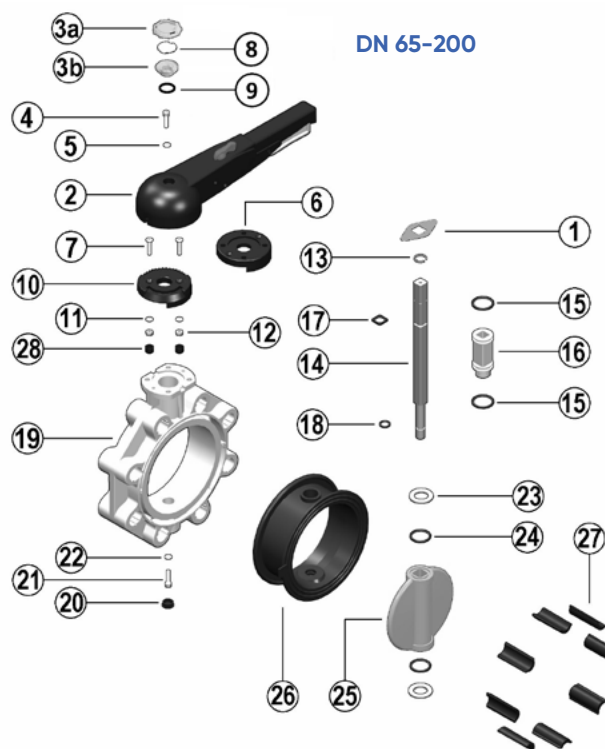
WORKING TEMPERATURE (°C)

	T min. (°C)	T max. (°C)
PVC-U	0	60
PVC-C	0	100
PP-H	0	100
PVDF	0	100
ABS	0	60

FLOW COEFFICIENT KV100

kv100 is the volume in liter, of water at 20°C that will flow per minute through the valve with a pressure drop $\Delta p = 1$ bar across the valve. The kv100 values shown in the table are calculated with the valve completely open.

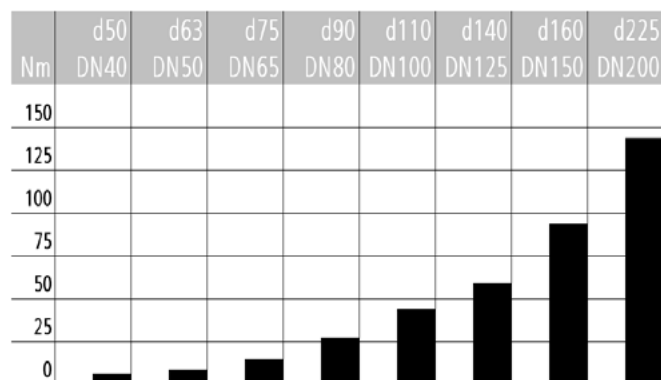
D	d50	d63	d75	d90	d110	d140	d160	d225
DN	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200
Kv100 l/min	1000	1285	1700	3550	5900	9850	18700	30500



Pos	Components	Material	n°
1	Position indicator	ABS	1
2	Handle	PVC	1
3	Plug upper part	PVC	1
3b	Plug lower part	PVC	1
4	Screw	Stainless steel	1
5	Washer	Stainless steel	1
6	Flange	GR-PP	1
7	Screw	Stainless steel	2
8	Tag holder	NBR	1
9	Plug O-Ring	PVC	1
10	Pad	GR-PP	1
11	Washer	Stainless steel	2
12	Nut	Stainless steel	2
13	Seeger ring	Stainless steel	1
14	Shaft	Stainless steel	1
15	Bush O-ring	EPDM o FKM	2
16	Bush	Nylon	1
17	Shaft O-ring	EPDM o FKM	1
18	Shaft O-ring	EPDM o FKM	1
19	Body	GR-PP	1
20	Protection cap	PE	1
21	Screw	Stainless steel	1
22	Washer	Stainless steel	1
23	Anti-friction ring	PTFE	2
24	Disc O-ring	EPDM o FKM	2
25	Disc	PVC, PP, PVCC, ABS, PVDF	1
26	Primary liner	EPDM, FKM, NBR	1
27	Insert	ABS	8
28	Protection cap	PE	2



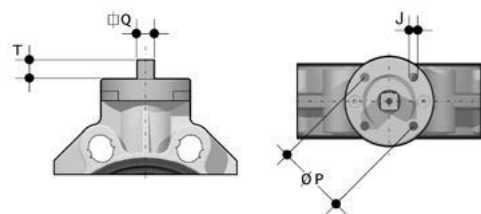
5 MAX TORQUE AT MAXIMUM WORKING PRESSURE



6 ACTUATION

The valve can be supplied with actuators on request. Standard pneumatic, electric actuators or gearboxes can easily be installed on directly on integrally moulded mounting pad, drilled according to ISO 5211, F05, F07 and F10.

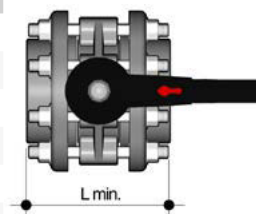
d	DN	J	P	T	Q
50	40	7	50	F 05	12
63	50	7	50	F 05	12
75	65	7	50/70	F 05/F 07	12
90	80	9	70	F 07	16
110	100	9	70	F 07	16
140	125	9	70	F 07	19
160	150	9	70	F 07	19
225	200	11	102	F 10	22



7 DIMENSIONS OF THE BOLTS TO BE USED IN INSTALLATION

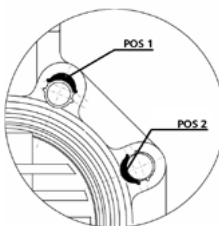
* Torque required for watertight joints (1,5 x PN at 20° C) (new or lubricated bolts).

d	DN	L min	*Nm
50	40	M16x150	10
63	50	M16x150	13
75	65	M16x170	15
90	80	M16x180	18
110	100	M16x180	20
140	125	M16x210	35
160	150	M20x240	40
225	200	M20x260	55



8 INSERTS POSITIONING

	Series 1	Series 2	Series 3	Series 4	Series 5
d 50 DN 40	Pos.1	Pos.2	Pos.1	Pos.1	Pos.1
d 63 DN 50	Pos.1	Pos.2	Pos.1	-	-
d 75 DN 65	Pos.1	Pos.2	Pos.1	Pos.2	Pos.1
d 90 DN 80	Pos.1	Pos.2	Pos.1	Pos.2	Pos.1
d 110 DN 100	Pos.1	Pos.2	Pos.1	Pos.2	Pos.1
d 140 DN 125	Pos.1	Pos.2	Pos.1	Pos.2	Pos.1
d 160 DN 150	Pos.1	Pos.2	Pos.1	Pos.2	Pos.1
d 225 DN 200	Pos.1	PN10	Pos.2	Pos.2	Pos.1



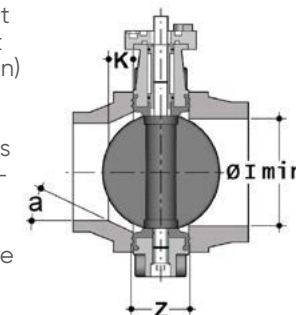
Series 1: ISO 9624 PN6, DIN 2501 PN6, EN 1092-1/2 PN6, DIN 8063-4 PN6
 Series 2: ISO 9624 PN10/16, DIN 2501 PN10/16, EN 1092-1/2 PN10/16, DIN 8063-4 PN10/16
 Series 3: BS 10 Table A-D-E Spec. D-E
 Series 4: ASME B16.5 class 150, BS EN 1759-1 class 150
 Series 5: JIS B2220

CONNECTION TO THE SYSTEM

A FIP STUBS CODES

VALVE	PIPE	PVC-U PN16	PP-H PN6 SDR 17,6- S8,3	PP-H PN10 SDR 11 - S5
50	50	QPV050	QBM17050	QBM11050
63	63	QPV063	QBM17063	QBM11063
75	75	QPV075	QBM17075	QBM11075
90	90	QPV090	QBM17090	QBM11090
110	110	QPV110	QBM17110	QBM11110
140	125	QPV125FKE	QBM17125	QBM11125
140	140	QPV140	QBM17140	QBM11140
160	160	QPV160	QBM17160	QBM11FK160
160	180	QPV180	QBM17180	QBM11180
225	200	QPV200FKE	QBM17FK200	QBM11FK200
225	225	QVR225	QBM17225	QBM11FK225

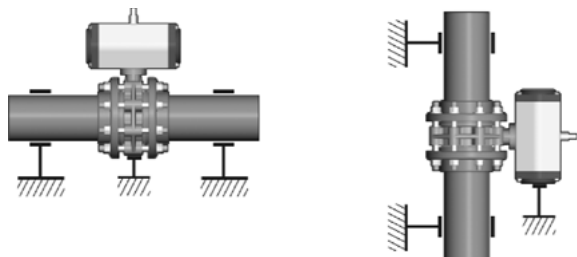
Before installing the valve it is suggested to check that stub internal diameter (l min) allows the complete disc opening. For installation it is advisable to use FP stubs (Tab. A), or verify the valve-stub-flange combination and chamfer according to the K - a dimensions, where necessary.



VALVE	PIPE			PP-PE SDR 17,6 - S8,3		PP-PE SDR 11 - S5	
d	d	l min.	Z	K	a	K	a
50	50	25	33	-	-	-	-
63	63	28	43	-	-	-	-
75	75	47	46	-	-	-	-
90	90	64	49	-	-	-	-
110	110	84	56	-	-	-	-
140	125	108	64	-	-	-	-
140	140	108	64	-	-	-	-
160	160	134	70	-	-	26,5	20°
160	180	134	70	-	-	-	-
225	200	187	71	35	20°	35	25°
225	225	187	71	-	-	40	15°



- C** Actuated valves should be properly installed and supported

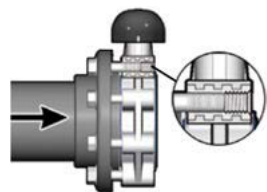
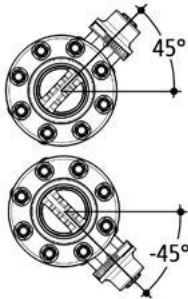
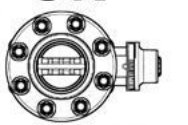


- D** If being used with liquids where suspended solids are present, or the risk of scaling may occur.

NO



OK



End of line with LUG inserts
in AISI316

FREE

LOCK



Handle block

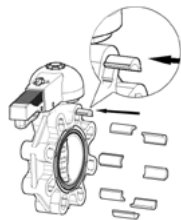


TORQUE REQUIRED

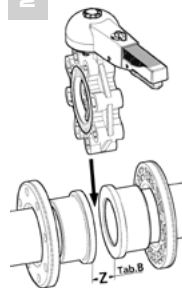
Install: 1-2-3-4-5

Dismantle: 5-4-3-2-1-5

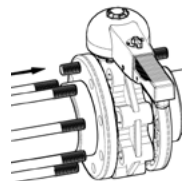
1



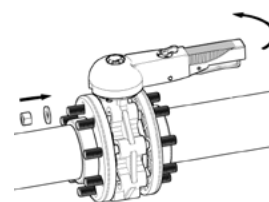
2



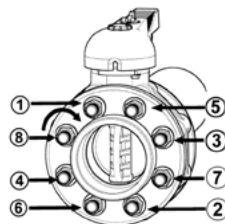
3



4



5



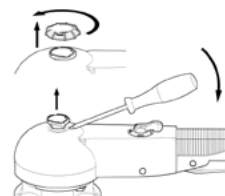
ASSEMBLY

Disassembly: 6-7-8-9-10-11-12-13

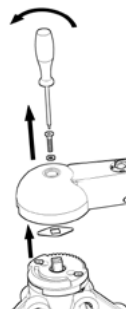
Assembly: 13-12-11-10-9-8-7-6

Lubricate the primary liner

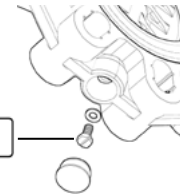
6



7



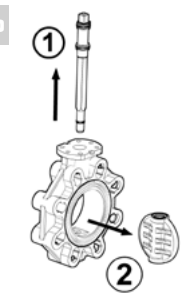
8



9



10



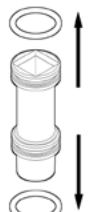
11



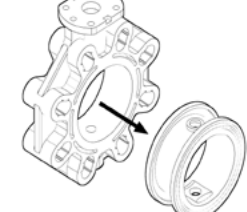
Screw tightening torque Nm

D50-63	M4	2,7	3,0 max
D75	M5	5,0	5,9 max
D90-160	M6	8,8	10,0 max
D225	M8	20,0	25,0 max

12



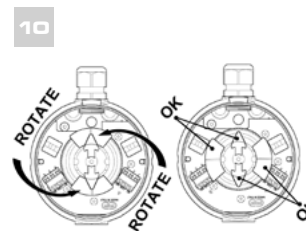
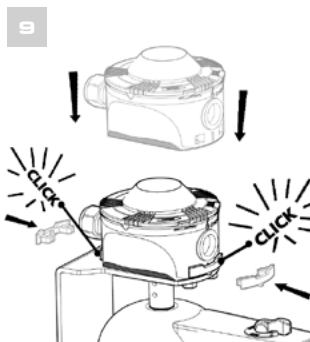
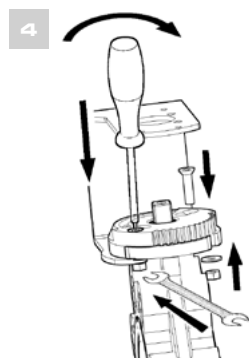
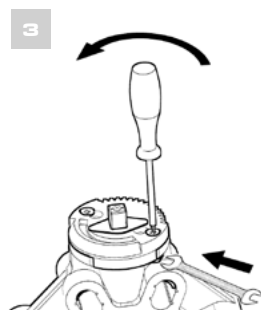
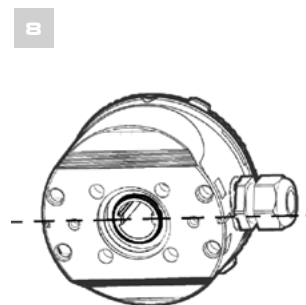
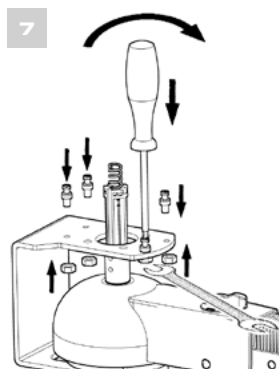
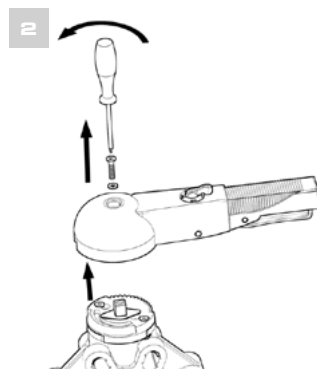
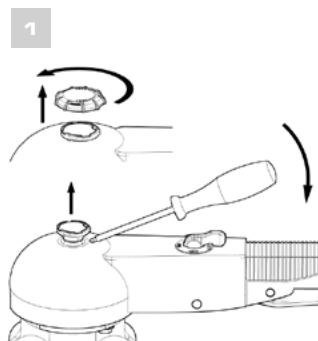
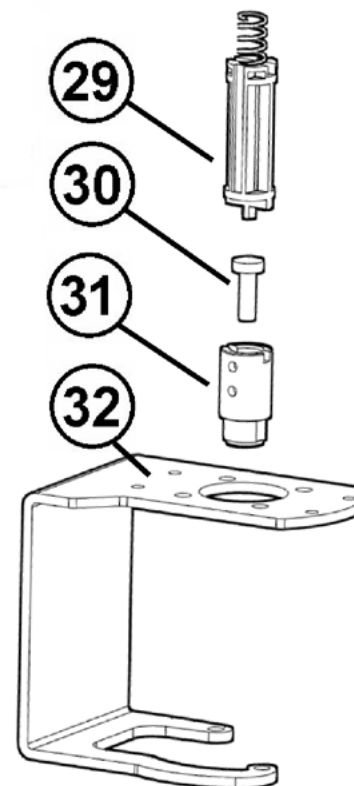
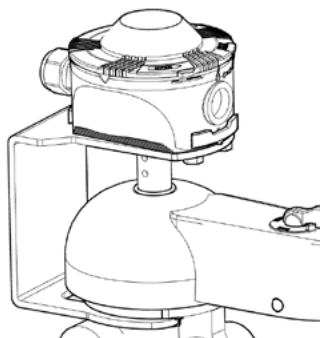
13





ACCESSORIES

KIT LSQT



Pos	Components	Material	n°
29	Module / sprig	PP/Stainless steel	1
30	Screw (D50-63 KIT)	Stainless steel	1
30	Screw (D75-225)	Stainless steel	*
31	Coupling spindle	Stainless steel	1
32	Bracket	Stainless steel	1

*From handle of valve.

INTRODUCTION

This Instruction manual should be read before the installation and / or put into service in order to avoid damage to property or danger to people.

SYMBOLS

The following illustrations are used throughout this manual to highlight where an instruction must be followed.

INDICATION

 This symbol highlights a process that the installer / operator must follow carefully.

WARNING!

 This symbol refers to the work and instructions which must be precisely performed in order to avoid damage or destruction of the device.

WARNING

 It is important to avoid rapid closure of valves to eliminate the possibility of water hammer causing damage to the pipeline.

TRANSPORT AND STORAGE

The box should not suffer impacts and falls that could compromise the structural resistance of its parts. The box must be stored in a place with a temperature between -10° and 50°C, and must not be exposed to U.V. rays.

DECLARATION OF CONFORMITY

Available at the following link: https://www.aliaxis.it/website/aliaxis-it/DOWNLOAD/CERTIFICATI-FIP/PED_2014-68-UE/Declaration_PED_FIP.pdf

LSQT - LIMIT SWITCH BOX QUARTER TURN



WARNINGS

READ THESE INSTRUCTIONS BEFORE INSTALLING THE BOX

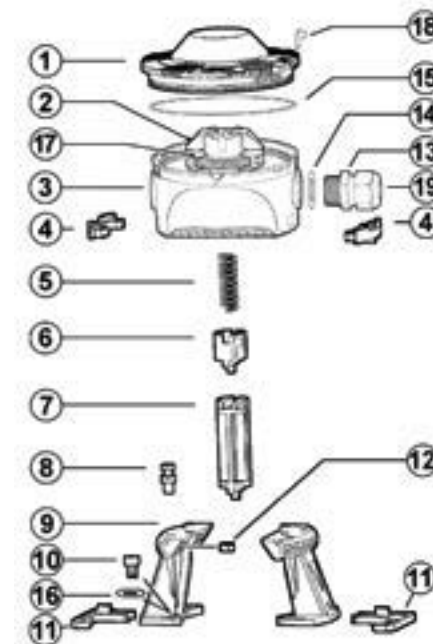
 Read and follow the safety instructions in this manual to avoid injury, death and significant property damages.

HAZARDOUS VOLTAGE

Disconnect the power supply before working on the equipment

WARNING! DO NOT REMOVE THE COVER WHEN THE EQUIPMENT IS LIVE

Do not exceed the switch limitations of use. Exceeding limits may cause equipment damages. The level of protection depends on the cable gland and wiring method used. Limit switch box for use on quarter turn valves (90° rotation). Follow the procedure below before using the LSQT.



Pos.	Components	n°
1	Cover (Polycarbonate)	1
2	Cams (POM black)	2
3	Body (PP GF30% Black)	1
4	Fixation clips (ABS Black)	2
5	Spring (Stainless Steel)	1
6	Modular key (PA66 GF30% black)	1
7	Key estension (PA66 GF30% black)	1
8	Fixation pins (Stainless Steel)	4
9	Brackets (PA66 GF30% black)	2
10	M5 Screw (Stainless Steel)	4
11	130x30 extensions (PA66 GF30% black)	2
12	M5 Bolt (Stainless Steel)	4
13	Cable gland (PA6)	1
14	Gland O-ring (EPDM)	1
15	Cover O-ring (EPDM)	1
16	M5 Washer (Stainless Steel)	4
17	Arrows (POM yellow)	3
18	Security lock (ABS black)	1
19	Union nut (PA)	1

The material of the component and the quantity supplied are indicated between brackets

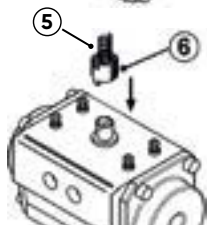
DIRECT INSTALLATION

Namur pattern 80x30, h: 20-30 mm, D ≤ 18 mm
VDI/VDE3845 compliant

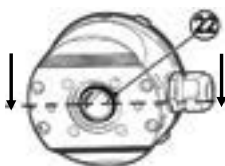
- 1** Firmly screw in the four lock pins to end stop **(8)**



- 2** Position the module **(6)** and the spring **(5)** on the actuator rod



- 3** Align pinion **(22)** to module **(6)** on the actuator



- 4a** Mount the box **(3)** on the actuator



- 4b** Make sure it hits end stop



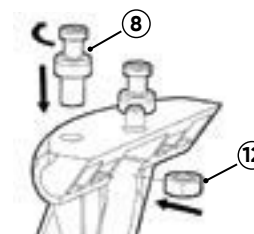
- 5** Secure the box hooking the clips **(4)** on the lock pins until you hear a "click" that indicates correct hook up



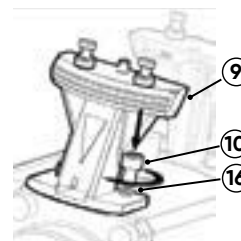
INSTALLATION WITH BRACKET

Namur pattern 80x30, h: 20-30 mm, D > 18 mm
VDI/VDE3845 compliant

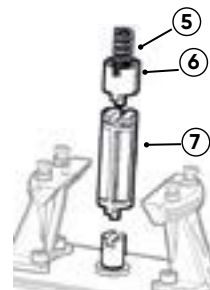
- 1** Insert the four nuts **(12)** in the relevant bracket seats, firm screw in the four lock pins to end stop **(8)**.



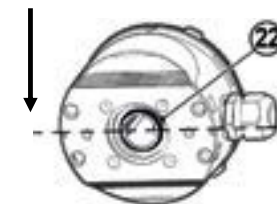
- 2** Secure the two brackets **(9)** over the actuator using the four screws **(10)** and washers **(16)**



- 3** Position the module **(6)** and the spring **(5)** plus extension **(7)** on the actuator rod



- 4** Align pinion **(22)** to module **(6)** on the actuator



- 5** Mount the box on the brackets making sure it hits end stop



- 6** Secure the box hooking the clips on the lock pins until you hear a "click" that indicates correct hook up

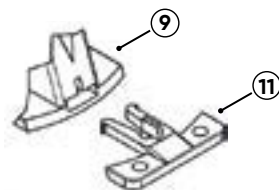


INSTALLATION WITH BRACKET

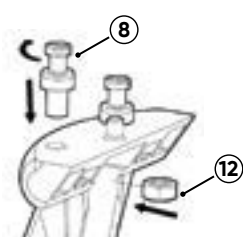
Namur pattern 130x30

VDI/VDE3845 compliant

- 1** Insert the extensions **(11)** on the brackets **(9)**



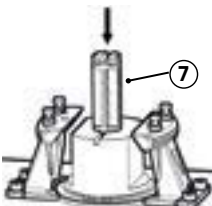
- 2** Insert the four nuts **(12)** in the relevant bracket seats, firm screw in the four lock pins to end stop **(8)**



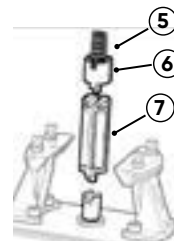
- 3** Secure the two brackets **(9)** over the actuator using the four screws **(10)** and washers **(16)**



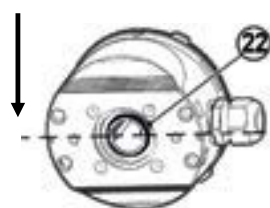
- 4a** Rod height 50 mm. Only place the extension **(7)** on the actuator rod



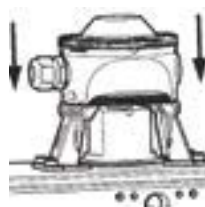
- 4b** Rod height ≤ 30 mm. Position the module **(6)** and the spring **(5)** plus extension **(7)** on the actuator rod



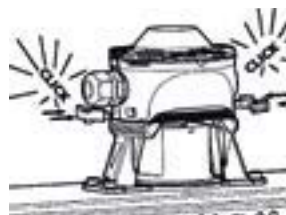
- 5** Align pinion **(22)** to module **(6)** on the actuator



- 6** Mount the box on the brackets making sure it hits end stop



- 7** Secure the box hooking the clips on the lock **(4)** pins until you hear a "click" that indicates correct hook up



WIRING- HAZARDOUS VOLTAGE

Disconnect the power supply before working on the equipment.

Check correct cable gland torque **(13)**.

Remove the Union nut **(19)** from the cable gland **(13)**.

Thread the Union nut **(19)** on the cable and thread the wires through the cable gland **(13)**.

Connect the wires to the terminals **(A)** following the wiring diagram.

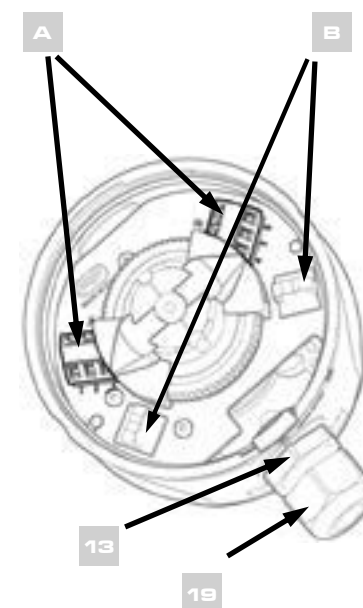
See diagram on the label.

Tighten the terminal screws **(A)** using a screwdriver.

Gather the wires in the two clips **(B)**.

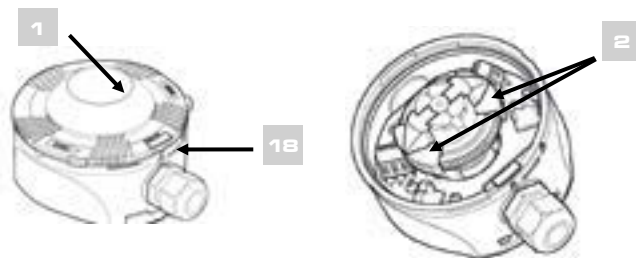
Firmly tighten the Union nut **(19)**.

Reassemble the cover 111 turning it clockwise to end stop
Lower the safety lock **(18)**.



MICRO SWITCH CALIBRATION AND INDICATOR ALIGNMENT

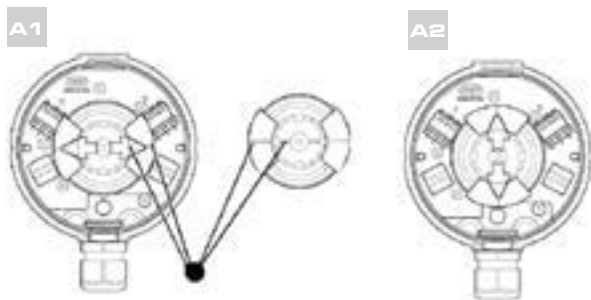
Lift the safety lock (18) and turn the cover (1) counter-clockwise and then remove it. If necessary, align as follows: **A, B, C.**



A 2 WAY NORMALLY CLOSED (COUNTER-CLOCKWISE OPENING)

A1) Normally closed position, align cams, pinions, indicators, switch "A" engaged.

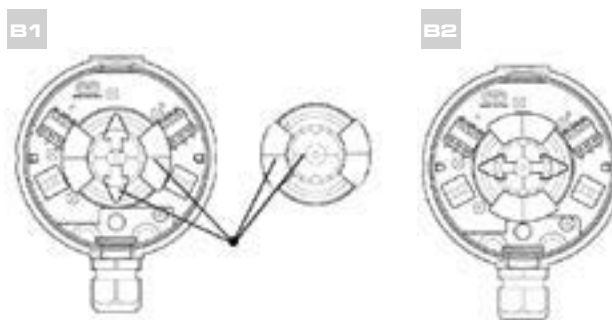
A2) Powered position, valve open, switch "B" engaged.



B 2 WAY NORMALLY OPEN (COUNTER-CLOCKWISE CLOSING)

B1) Normally open position, align cams and pinions, indicators 90° from cams, switch "A" engaged.

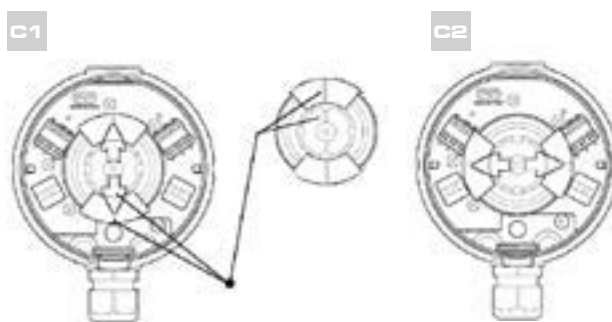
B2) Powered position, valve closed, switch "B" engaged.



C 2 WAY NORMALLY OPEN (CLOCKWISE CLOSING)

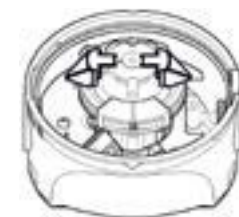
C1) Normally open position, align cams, pinions, indicators, switch "B" engaged.

C2) Powered position, valve closed, switch "A" engaged.

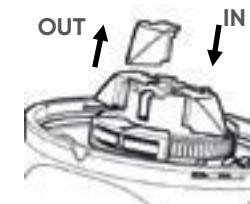


CONFIGURING POSITION INDICATORS FOR 2-WAY OR 3-WAY VALVES

2 WAYS



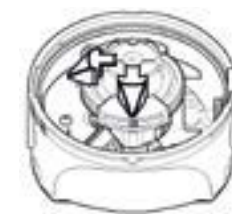
CHANGE



3 WAYS (T-type)



2 WAYS (L-type)



LABELLING SYSTEM - CUSTOMIZABLE HANDLES



The tag holder, embedded in the transparent plug, can be easily removed and

self labelled on its blank side. To fix the label, previously printed with the

EASYFIT Labelling System software, see the following instructions

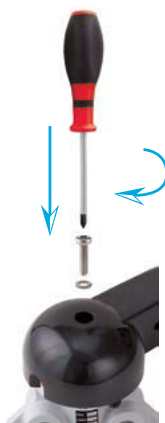
1



2



1



2



WEEE

Waste electrical and electronic equipment.



This product falls under the field of application of Directive 2012/19/EU concerning electric and electronic equipment waste management (WEEE).

The equipment must not be discarded with domestic waste since made up of various materials that can be recycled at suitable centres. Apply to your town authorities as to the location of disposal sites that can receive the product for disposal and subsequent correct recycling.

Please also remember that the distributor is required to freely dispose of old products when an equivalent product is purchased.

The product is not potentially harmful to human health and the environment since it does not contain harmful substances as per Directive 2011/65/EU (RoHS) but can negatively impact the environment if littered.

Carefully read the instructions before using the equipment for the first time. Please do not use the product in any way other than its intended use since this could cause electrical shock.

The barred bin on the label indicates product compliance with electric and electronic equipment waste regulations. Littering the environment with this equipment or incorrect disposal are punishable by law.

INTRODUCTION

Ce manuel d'instructions doit être lu avant l'installation et / ou la mise en service afin d'éviter des dommages matériels ou la mise en danger des personnes.

SYMBOLES

Les illustrations suivantes sont utilisées dans ce manuel comme symboles et notifications d'avertissement.

INDICATION



Ce symbole indique une indication que l'installateur ou l'exploitant doit suivre attentivement.

ATTENTION !



Ce symbole fait référence à des tâches et instructions qui doivent être réalisées et suivies précisément afin d'éviter des dommages ou la destruction du produit.

DANGER !



Ce symbole fait référence à des tâches et instructions qui doivent être réalisées et suivies précisément pour éviter toute mise en danger des personnes.

TRANSPORT ET STOCKAGE

Les vannes ne doivent pas être soumises à des chocs ou une chute qui pourraient affecter la résistance structurelle des parties sous pression. Les vannes doivent être entreposées à des températures entre 0 ° et 50 ° C, et ne doivent pas être exposées au rayonnement UV.

WARNING



Toujours éviter des fermetures trop rapides des vannes. A ce but il est conseillé de prévoir l'installation d'un réducteur de manoeuvre manuel.

DÉCLARATION DE CONFORMITÉ

Disponible au lien suivant : https://www.aliaxis.it/website/aliaxis-it/DOWNLOAD/CERTIFICATI-FIP/PED_2014-68-UE/Declaration_PED_FIP.pdf

DONNÉES TECHNIQUES

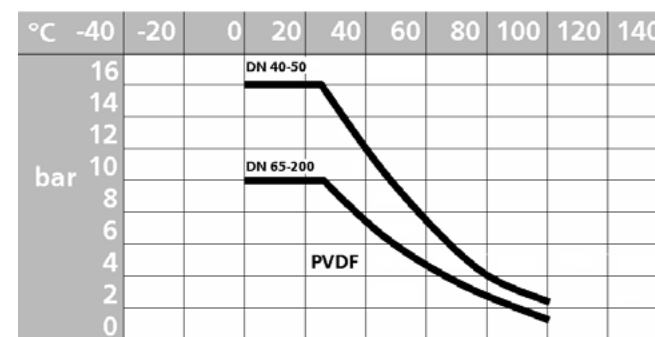
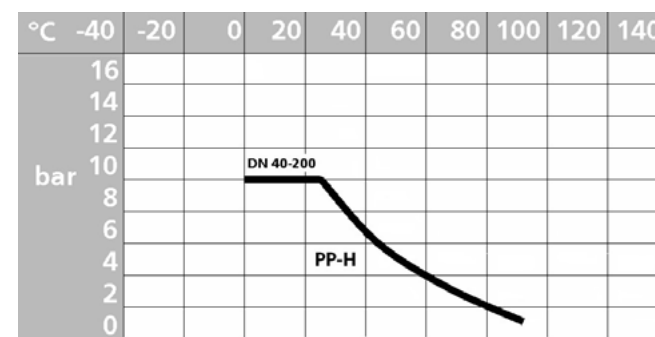
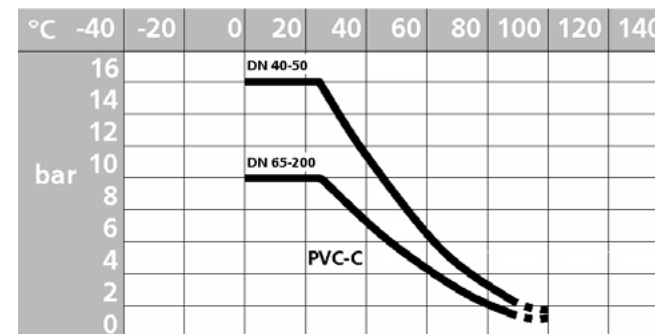
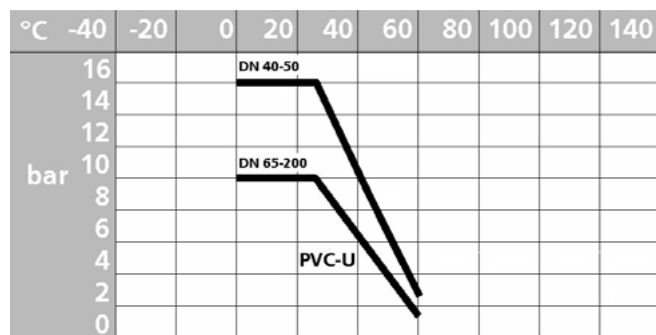
CARACTÉRISTIQUES DU MATERIEL

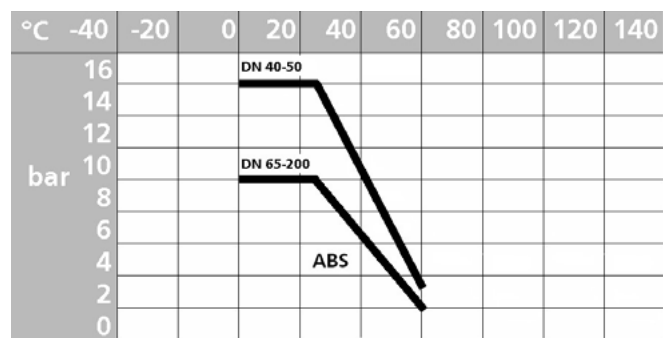
Les pressions maximales de service des vannes FIP, pour le transport de l'eau à 20 °C, sont indiquées dans la fig.1. Pour des températures supérieures à 20 °C, on doit réduire les pressions maximales de service selon la courbe de la fig. 2. Sur son site web (www.aliaxis.it) FIP a prévu un guide de la résistance chimique des matières thermoplastiques et élastomères. Celui-ci indique le domaines d'utilisation des robinets FIP (corps et garnitures) dans le transport des produits chimiques.

1 PRESSION MAXIMALE DE SERVICE À 20° C

	(mm)	d50	d63	d75	d90	d110	d140	d160	d225
Size	(mm)	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200
PVC-U	(bar)	16	16	10	10	10	10	10	10
PP-H	(bar)	10	10	10	10	10	10	10	10
PVC-C	(bar)	16	16	10	10	10	10	10	10
PVDF	(bar)	16	16	10	10	10	10	10	10
ABS	(bar)	16	16	10	10	10	10	10	10

2 VARIATION DE LA PRESSION EN FONCTION DE LA TEMPÉRATURE





! Avant d'utiliser le PVC-C à température de service audessus de 90° C nous vous prions de contacter le service technique.

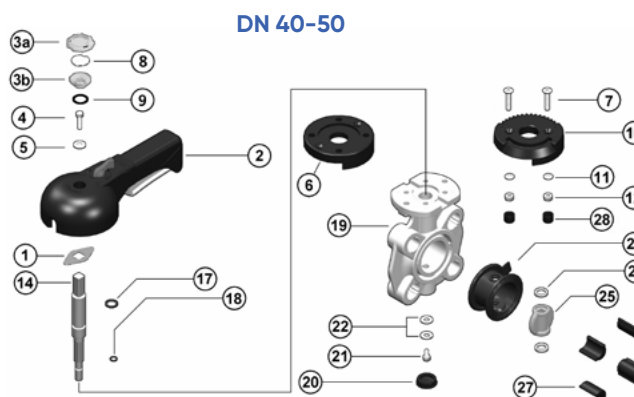
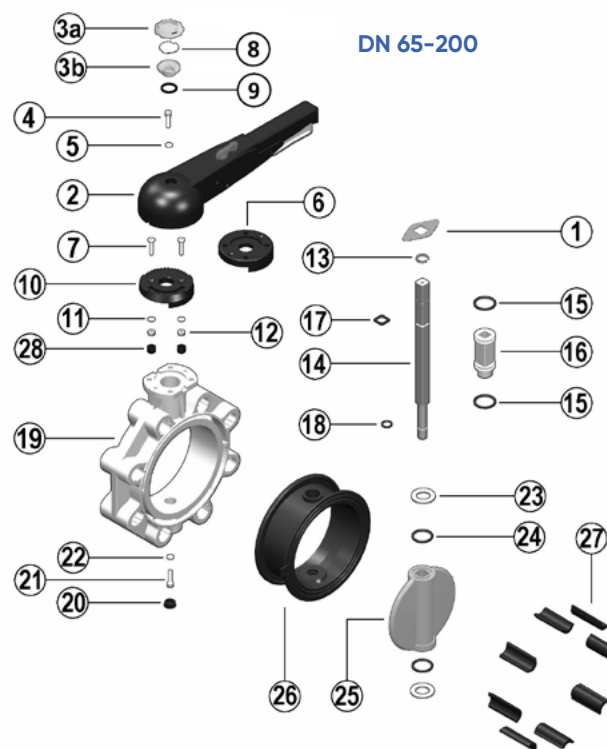
3 TEMPÉRATURE DE SERVICE (°C)

	T min. (°C)	T max. (°C)
PVC-U	0	60
PVC-C	0	100
PP-H	0	100
PVDF	0	100
ABS	0	60

4 FLOW COEFFICIENT KV100

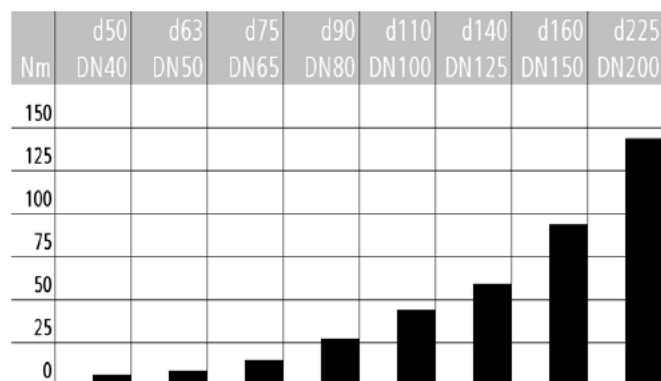
kv100 is the volume in liter, of water at 20°C that will flow per minute through the valve with a pressure drop $\Delta p = 1$ bar across the valve. The kv100 values shown in the table are calculated with the valve completely open.

D	d50	d63	d75	d90	d110	d140	d160	d225
DN	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200
Kv100 l/min	1000	1285	1700	3550	5900	9850	18700	30500



Pos	Components	Materiaux	n°
1	Indicat. de poistion	ABS	1
2	Poignée	PVC	1
3	Bouchon partie sup.	PVC	1
3b	Bouchon partie inf.	PVC	1
4	Vis de fixation	Acier inox	1
5	Rondelle	Acier inox	1
6	Bride	PP-GR	1
7	Vis	Acier inox	2
8	Support pour l'etiquette	NBR	1
9	Joint du bouchon	PVC	1
10	Plateau	PP-GR	1
11	Rondelle	Acier inox	2
12	Ecrou	Acier inox	2
13	Bague Seeger	Acier inox	1
14	Tige	Acier inox	1
15	O-ring douille	EPDM ou FKM	2
16	Douille	Nylon	1
17	O-ring tige	EPDM ou FKM	1
18	O-ring tige	EPDM ou FKM	1
19	Corps	PP-GR	1
20	Plug de protection	PE	1
21	Vis	Acier inox	1
22	Rondelle	Acier inox	1
23	Bague anti-friction	PTFE	2
24	O-ring papillon	EPDM ou FKM	2
25	Papillon	PVC, PP, PVCC, ABS, PVDF	1
26	Manchette	EPDM, FKM, NBR	1
27	Entretoises	ABS	8
28	Plug de protection	PE	2

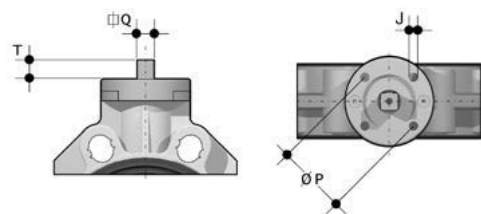
5 COUPLE DE MANOEUVRE À LA PRESSION MAXIMALE DE SERVICE



6 ACTIONNEMENT

Sur demande, la vanne peut être fournie avec des servomoteurs. Il est possible de monter directement des actionneurs pneumatiques et/ou électriques et des réducteurs à volant pour alléger la manoeuvre, grâce au perçage de la platine suivant la norme ISO 5211, F05, F07 et F10.

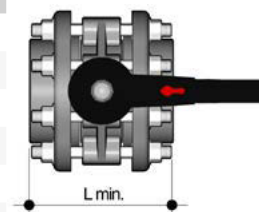
d	DN	J	P	T	Q
50	40	7	50	F 05	12
63	50	7	50	F 05	12
75	65	7	50/70	F 05/F 07	12
90	80	9	70	F 07	16
110	100	9	70	F 07	16
140	125	9	70	F 07	19
160	150	9	70	F 07	19
225	200	11	102	F 10	24



7 DIMENSIONS DES BOULONS À UTILISER POUR L'INSTALLATION

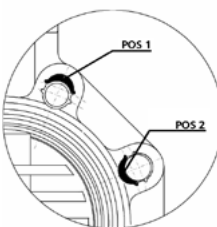
* Couple requis pour joints étanches (1,5 x PN À 20° C) (boulons neufs ou lubrifiés).

d	DN	L min	*Nm
50	40	M16x150	10
63	50	M16x150	13
75	65	M16x170	15
90	80	M16x180	18
110	100	M16x180	20
140	125	M16x210	35
160	150	M20x240	40
225	200	M20x260	55



8 POSITIONNEMENT DES ENTRETOISES

	Série 1	Série 2	Série 3	Série 4	Série 5
d 50 DN 40	Pos.1	Pos.2	Pos.1	Pos.1	Pos.1
d 63 DN 50	Pos.1	Pos.2	Pos.1	-	-
d 75 DN 65	Pos.1	Pos.2	Pos.1	Pos.2	Pos.1
d 90 DN 80	Pos.1	Pos.2	Pos.1	Pos.2	Pos.1
d 110 DN 100	Pos.1	Pos.2	Pos.1	Pos.2	Pos.1
d 140 DN 125	Pos.1	Pos.2	Pos.1	Pos.2	Pos.1
d 160 DN 150	Pos.1	Pos.2	Pos.1	Pos.2	Pos.1
d 225 DN 200	Pos.1	PN10	Pos.2	Pos.2	Pos.1



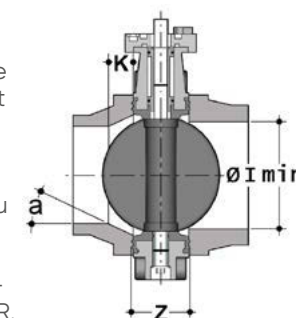
Série 1: ISO 9624 PN6, DIN 2501 PN6, EN 1092-1/2 PN6, DIN 8063-4 PN6
 Série 2: ISO 9624 PN10/16, DIN 2501 PN10/16, EN 1092-1/2 PN10/16, DIN 8063-4 PN10/16
 Série 3: BS 10 Table A-D-E Spec. D-E
 Série 4: ASME B16.5 class 150, BS EN 1759-1 class 150
 Série 5: JIS B2220

MONTAGE SUR LA CANALISATION

A FIP COLLER CODES

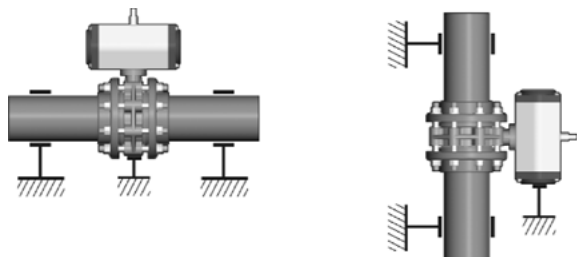
VALVE	PIPE	PVC-U PN16	PP-H PN6 SDR 17,6 - S8,3	PP-H PN10 SDR 11 - S5
50	50	QPV050	QBM17050	QBM11050
63	63	QPV063	QBM17063	QBM11063
75	75	QPV075	QBM17075	QBM11075
90	90	QPV090	QBM17090	QBM11090
110	110	QPV110	QBM17110	QBM11110
140	125	QPV125FKE	QBM17125	QBM11125
140	140	QPV140	QBM17140	QBM11140
160	160	QPV160	QBM17160	QBM11160
160	180	QPV180	QBM17180	QBM11180
225	200	QPV200FKE	QBM17FK200	QBM11FK200
225	225	QVR225	QBM17225	QBM11FK225

Avant d'effectuer l'installation de la vanne il est conseillé de vérifier que diamètre intérieur du collet permette l'ouverture du papillon. Pour installation il est toujours conseillé de utiliser Coller FIP (Tab.A), ou vérifier les accouplements vanne-collet-bride et les cûtes de chamfreinage K - a si nécessaire selon le SDR.

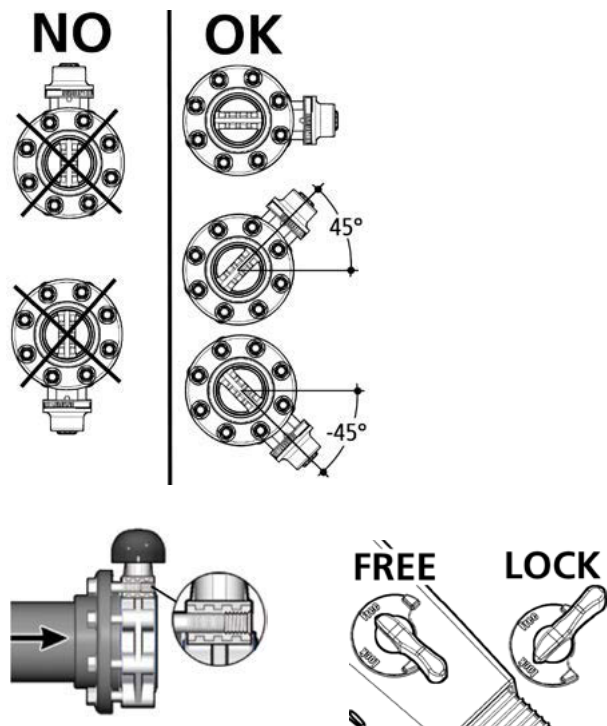


VALVE	PIPE			PP-PE SDR 17,6 - S8,3	PP-PE SDR 11 - S5
d	d	l min.	Z	K	a
50	50	25	33	-	-
63	63	28	43	-	-
75	75	47	46	-	-
90	90	64	49	-	-
110	110	84	56	-	-
140	125	108	64	-	-
140	140	108	64	-	-
160	160	134	70	-	26,5
160	180	134	70	-	-
225	200	187	71	35	20°
225	225	187	71	-	25°

- C** Pour les vannes avec actionneurs en grands diamètres prévoir un supportage de la vanne sur la canalisation



- D** Dans le cas de fluides chargés ou de risque de sédimentation



Fin de ligne avec LUG inserts en AISI316

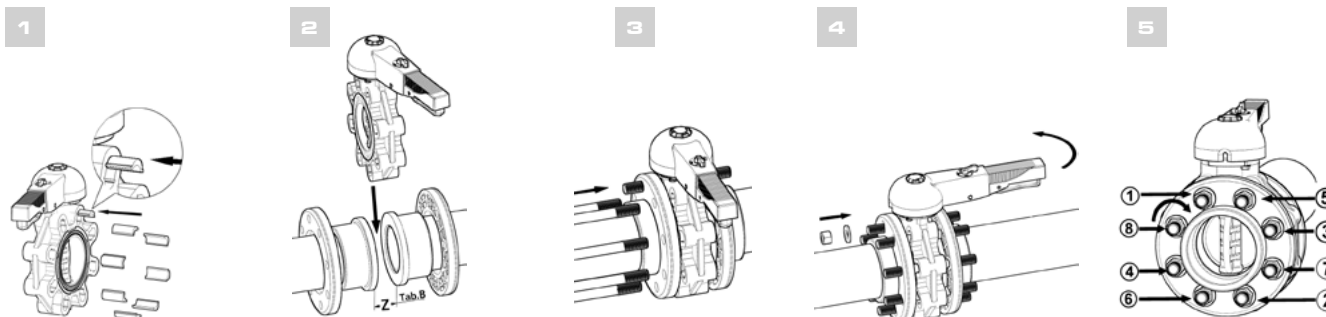
Blocage de la poignée



COUPLE DE SERRAGE

Montage : 1-2-3-4-5

Démontage : 5-4-3-2-1

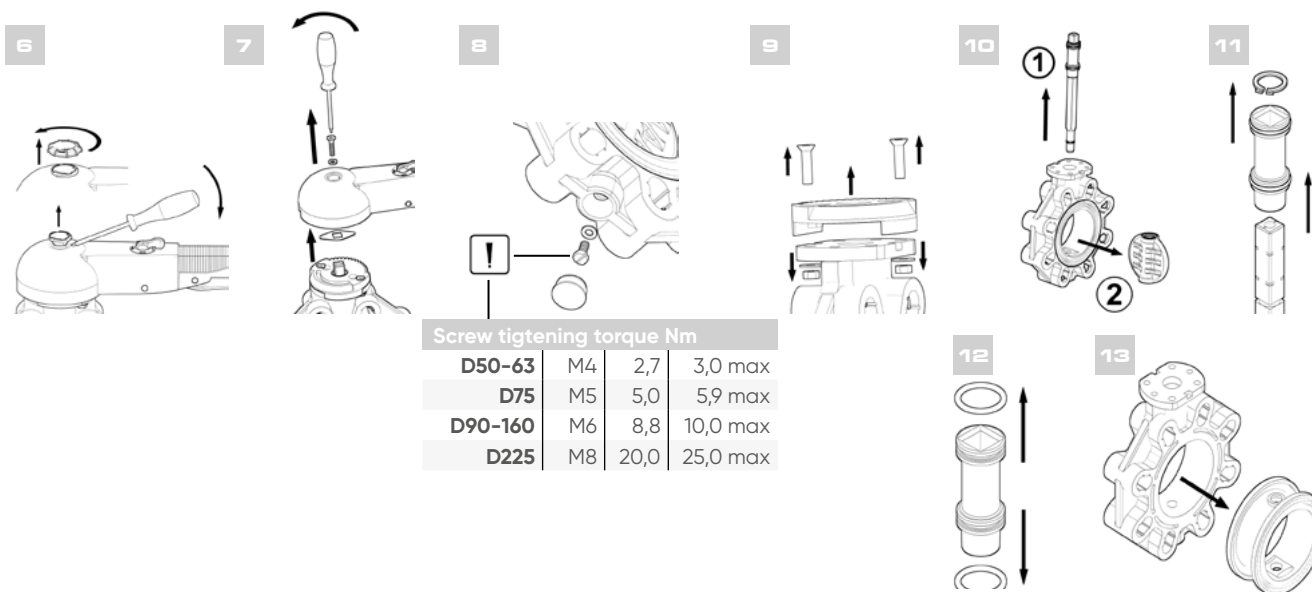


MONTAGE

Démontage : 6-7-8-9-10-11-12-13

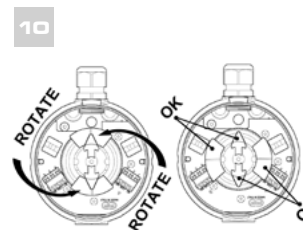
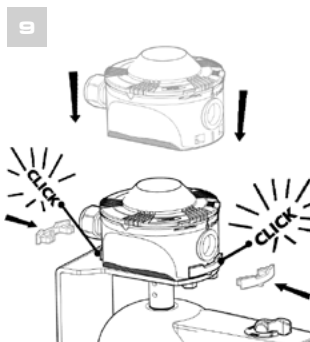
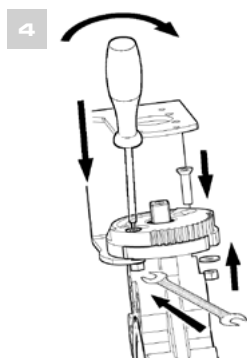
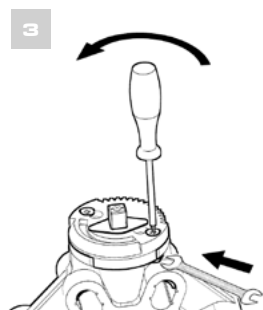
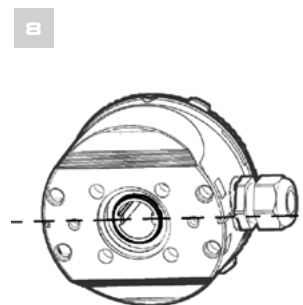
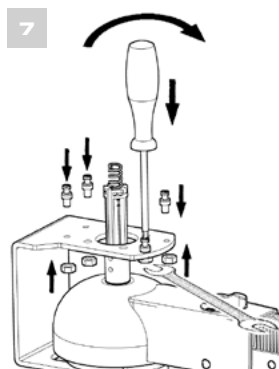
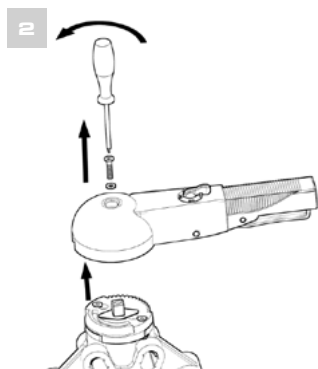
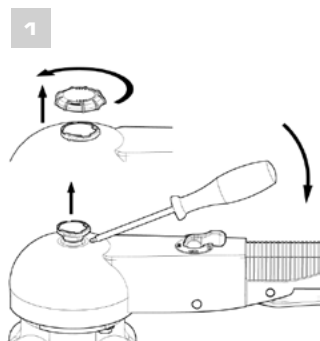
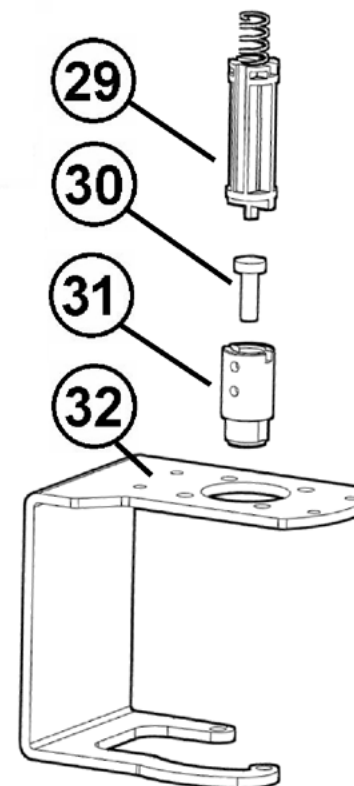
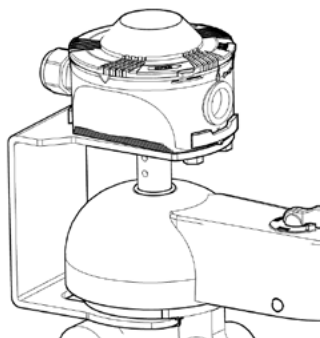
Montage : 13-12-11-10-9-8-7-6

Lubrifier le joint



ACCESSORIES

KIT LSQT



Pos	Composants	Matériaux	n°
29	Module/Ressort	PP/Acier inox	1
30	Vis (D50-63 KIT)	Acier inox	1
30	Vis (D75-225)	Acier inox	*
31	Raccord de passage	Acier inox	1
32	Bride	Acier inox	1

* De la poignée de la valve

INTRODUCTION

Ce manuel d'instructions doit être lu avant l'installation et / ou la mise en service afin d'éviter des dommages matériels ou la mise en danger des personnes.

SYMBOLES

Les illustrations suivantes sont utilisées dans ce manuel comme symboles et notifications d'avertissement.

INDICATION

 Ce symbole indique une indication que l'installateur ou l'exploitant doit suivre attentivement.

ATTENTION !

 Ce symbole fait référence à des tâches et instructions qui doivent être réalisées et suivies précisément afin d'éviter des dommages ou la destruction du produit.

DANGER !

 Ce symbole fait référence à des tâches et instructions qui doivent être réalisées et suivies précisément pour éviter toute mise en danger des personnes.

TRANSPORT ET ENTREPOSAGE

La boîte ne doit subir ni heurts ni chutes susceptibles de nuire à la résistance structurelle de ses composants. La boîte doit être stockée dans des lieux présentant une température comprise entre -10° et 50°C, et elle ne doit pas être soumise aux rayons

DÉCLARATION DE CONFORMITÉ

Disponible au lien suivant : https://www.aliaxis.it/website/aliaxis-it/DOWNLOAD/CERTIFICATI-FIP/PED_2014-68-UE/Declaration_PED_FIP.pdf

LSQT - BOÎTE DE FIN DE COURSE ¼ DE TOUR



AVERTISSEMENTS

LIRE LES PRESENTES INSTRUCTIONS AVANT D'INSTALLER LA BOÎTE

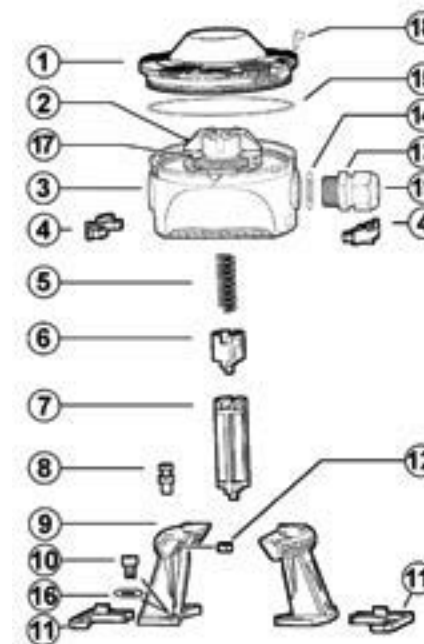
 Pour éviter les blessures, la mort ou des dommages matériels importants, lire et respecter toutes les instructions de sécurité contenues dans ce manuel.

 **TENSION DANGEREUSE**
Débrancher l'alimentation électrique avant de travailler sur l'équipement.

 **ATTENTION ! NE PAS ENLEVER LE COUVERCLE QUAND L'APPAREIL EST SOUS TENSION**

Ne pas dépasser pas les limites d'utilisation des interrupteurs. Le dépassement des limites peut endommager l'appareil. Le degré de protection dépend du presse-étoupe et de la méthode de câblage utilisée. Boîtier de fin de course pour vannes à quart de tour (rotation 90°). Suivre la procédure suivante avant de mettre la LSQT en service.

ÉTALONNAGE DES MICRORUPTEURS ET ALIGNEMENT DES INDICATEURS.



Rep.	Composants	nbre
1	Couvercle (Polycarbonate)	1
2	Cames (POM noir)	2
3	Corps (PP GF30% noir)	1
4	Clip de fixation (ABS noir)	2
5	Ressort (Acier INOX)	1
6	Module de raccordement (PA66 GF30% noir)	1
7	Rallonge module (PA66 GF30% noir)	1
8	Broches de fixation (Acier INOX)	4
9	Bride (PA66 GF30% noir)	2
10	Vis M5 (Acier INOX)	4
11	Rallonge de bride 130x30 (PA66 GF30% noir)	2
12	Écrou M5 (Acier INOX)	4
13	Presse-étoupe (PA6)	1
14	Joint torique presse-étoupe (EPDM)	1
15	Joint torique couvercle (EPDM)	1
16	Rondelle M5 (Acier INOX)	4
17	Indicateurs (POM jaune)	3
18	Bloc de sécurité (ABS noir)	1
19	Écrou union (PA)	1

Le matériau du composant est indiqué entre parenthèses.

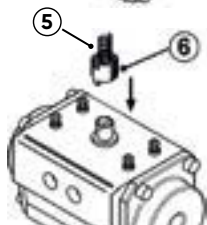
INSTALLATION DIRECTE

Namur pattern 80x30, h: 20-30 mm, D ≤ 18 mm
Conforme aux dispositions VDI/VDE3845

- 1** Visser les quatre goupilles de verrouillage en les serrant jusqu'à la butée **(8)**



- 2** Poser le module sur la tige **(6)** Le printemps **(5)** de l'actionneur



- 3** Aligner le pignon **(22)** avec le module **(6)** situé sur l'actionneur



- 4a** Monter le boîtier **(3)** sur l'actionneur



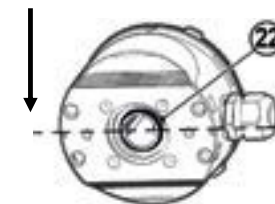
- 4b** Veiller à le placer en fin de butée



- 5** Fixer la boîte en engageant les clips **(4)** sur les goupilles de verrouillage jusqu'à ce que l'on entende un clic qui indique que l'engagement est correct



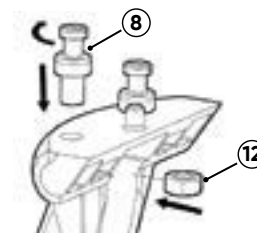
- 4** Aligner le pignon **(22)** avec le module **(6)** situé sur l'actionneur



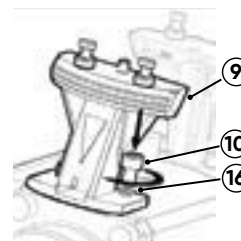
INSTALLATION AVEC BRIDE

Namur pattern 80x30, h: 20-30 mm, D > 18 mm
Conforme aux dispositions VDI/VDE3845

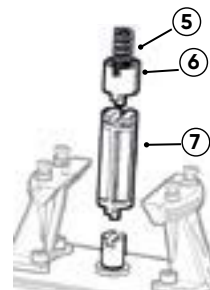
- 1** Insérer les quatre écrous **(12)** dans les logements respectifs de la bride, serrer les quatre goupilles de verrouillage en les serrant jusqu'en butée **(8)**



- 2** Fixez les deux supports **(9)** sur l'actionneur à l'aide des quatre vis **(10)** et rondelles **(16)**



- 3** Placer le module **(6)**
Le printemps **(5)** et sa rallonge **(7)** sur la tige de l'actionneur



- 5** Monter la boîte sur les brides en veillant à ce qu'il soit en butée



- 6** Fixer la boîte en engageant les clips sur les goupilles de verrouillage **(4)** jusqu'à ce que l'on entende un clic qui indique que l'engagement est correct

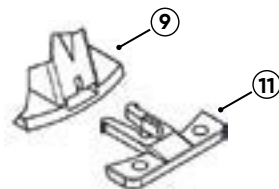


INSTALLATION AVEC BRIDE

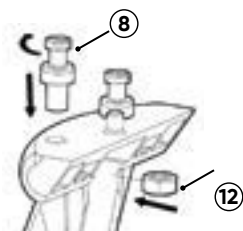
Namur pattern 130x30

Conforme aux dispositions VDI/VDE3845

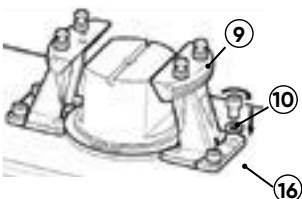
- 1** Insérer les extensions (11) sur les brides (9)



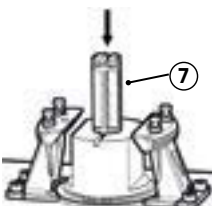
- 2** Insérer les quatre écrous (12) dans les logements respectifs de la bride, serrer les quatre goupilles de verrouillage (8) en les serrant jusqu'en butée



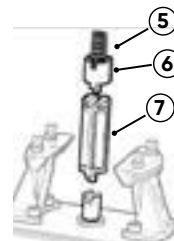
- 3** Fixer les deux brides (9) supports au-dessus de l'actionneur à l'aide des quatre vis (10) et des quatre rondelles (16)



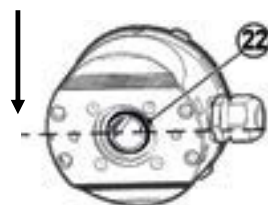
- 4a** Hauteur de la tige: 50 mm. Poser le module et sa rallonge (7) sur la tige de l'actionneur



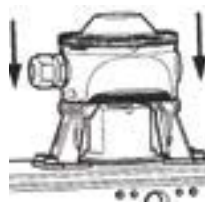
- 4b** Hauteur de la tige ≤ 30 mm. Placer le module (6) Le printemps (5) et sa rallonge sur la tige de l'actionneur



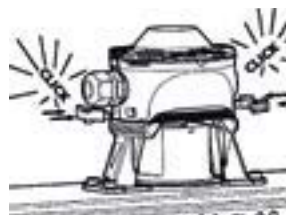
- 5** Aligner le pignon (22) avec le module (6) situé sur l'actionneur



- 6** Monter la boîte sur les brides en veillant à ce qu'il soit en butée



- 7** Fixer la boîte en engageant les clips sur les goupilles de verrouillage (4) jusqu'à ce que l'on entende un clic qui indique que l'engagement est correct



CÂBLAGE ELECTRIQUE TENSION DANGEREUSE

Débrancher l'alimentation électrique avant de travailler sur l'équipement.

Vérifier que le presse-étoupe (13) est bien serré.

Retirer l'écrou union (19) du presse-étoupe (13).

Monter l'écrou union (19) sur le câble électrique, puis faire passer les fils dans le presse-étoupe (13).

Raccorder les fils aux bornes (A) selon le schéma de raccordement, voir schéma sur l'étiquette.

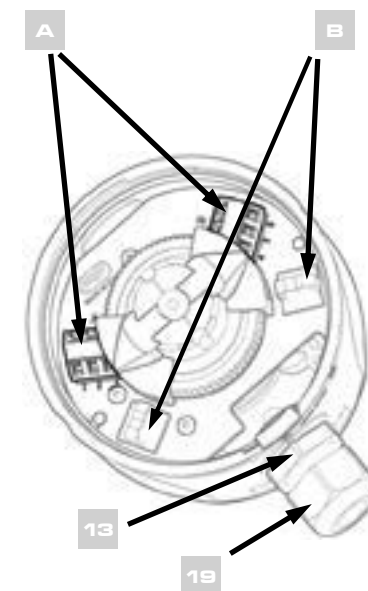
Serrer les vis des bornes (A) à l'aide d'un tournevis.

Rassembler les fils à l'intérieur des deux clips (B).

Serrer l'écrou union (19).

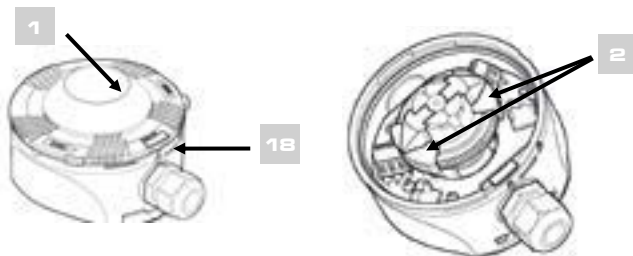
Remonter le couvercle (1) en le tournant dans le sens des aiguilles d'une montre jusqu'à ce qu'il atteigne la butée.

Abaissier le verrou de sécurité (18).



ÉTALONNAGE DES MICRORUPTEURS ET ALIGNEMENT DES INDICATEURS.

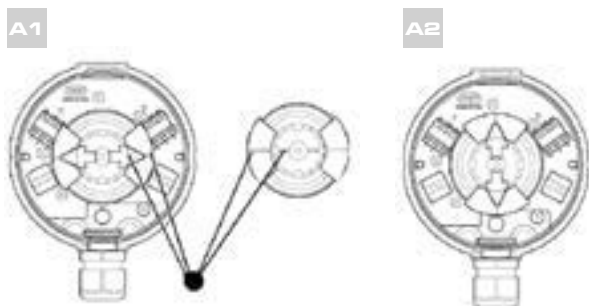
Soulever le bloc de sécurité (18) et tourner le couvercle (1) dans le sens inverse à celui des aiguilles d'une montre, puis le retirer. Si nécessaire, aligner selon les schémas: **A, B, C**.



A 2 VOIES NORMALEMENT FERMÉES (OUVERTURE SENS INVERSE DES AIGUILLES D'UNE MONTRE)

A1) Position normalement fermée, aligner les cames, le pignon et les indicateurs, interrupteur "A" enclenché.

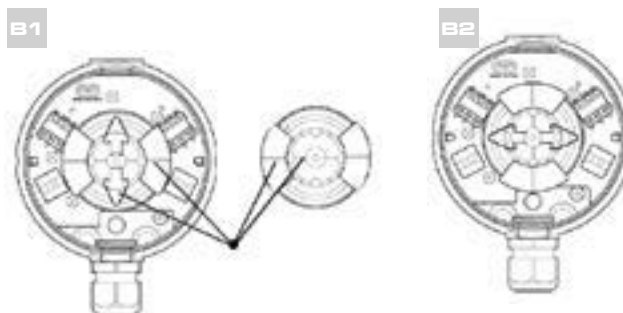
A2) Position sous tension, vanne ouverte, interrupteur "B" enclenché.



B 2 VOIES NORMALEMENT OUVERTES (FERMETURE SENS INVERSE DES AIGUILLES D'UNE MONTRE)

B1) Position normalement ouverte, aligner les cames et le pignon, indicateurs à 90° par rapport aux cames, interrupteur "A" enclenché.

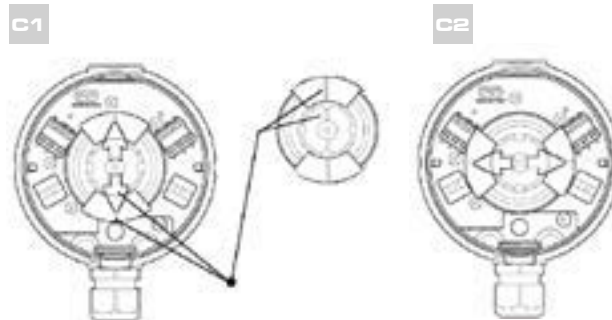
B2) Position sous tension, vanne fermée, interrupteur "B" enclenché.



C 2 VOIES NORMALEMENT OUVERTES (FERMETURE SENS DES AIGUILLES D'UNE MONTRE)

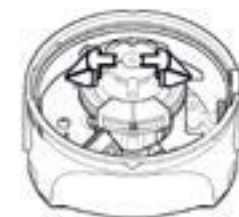
C1) Position normalement ouverte, aligner les cames, le pignon et les indicateurs, interrupteur "B" enclenché.

C2) Position sous tension, vanne fermée, interrupteur "A", enclenché.

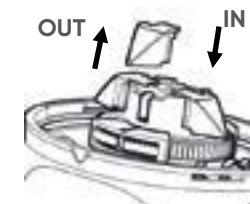


CONFIGURATION DES INDICATEURS DE POSITION POUR LES VANNES À 2 OU 3 VOIES

2 WAYS



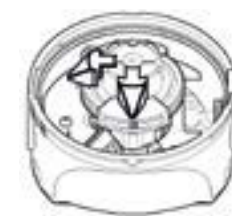
CHANGE



3 WAYS (T-type)



2 WAYS (L-type)



LABELLING SYSTEM - SYSTEME DE MARQUAGE



Le porte-étiquette est effondré dans le bouchon transparent et on peut l'enlever et le remplacer avec une étiquette personnalisée sur son côté vide. Pour appliquer l'étiquette à la vanne (qui vient d'être imprimé grâce au logiciel).

EASYFIT Labelling System) on doit procéder comme suit



DEEE

Déchets d'équipements électriques et électroniques.



Ce produit entre dans le domaine d'application de la directive 2012/19/UE relative à la gestion des déchets d'équipements électriques et électroniques (DEEE).

L'appareil ne doit pas être jeté avec les ordures ménagères, car il est composé de différents matériaux qui peuvent être recyclés dans des installations appropriées. Se renseigner auprès des autorités municipales sur l'emplacement des plates-formes écologiques destinées à recevoir le produit en vue de son élimination et de son recyclage ultérieur dans les règles de l'art.

Il est également rappelé que lors de l'achat d'un équipement équivalent, le distributeur est tenu de reprendre le produit à éliminer gratuitement.

Le produit n'est pas potentiellement dangereux pour la santé humaine et l'environnement, car il ne contient pas de substances nocives conformément à la directive 2011/65/UE (RoHS), mais s'il est abandonné dans l'environnement, il aura un impact négatif sur l'écosystème.

Lire attentivement les instructions avant d'utiliser l'appareil pour la première fois. Le produit ne doit en aucun cas être utilisé à d'autres fins que celles pour lesquelles il a été conçu, car il existe un risque d'électrocution en cas d'utilisation incorrecte.

Le symbole de la poubelle barrée sur l'étiquette indique que ce produit est conforme à la réglementation sur les déchets d'équipements électriques et électroniques. L'abandon d'équipements dans l'environnement ou leur mise au rebut sans autorisation est puni par la loi.



EINLEITUNG

Um Schaden an der Armatur und einer mögliche Gefährdung von Personen zu vermeiden, ist die Bedienungsanleitung vor der Montage oder der Inbetriebnahme sorgfältig zu lesen.

GEFAHRENSHINWEISE

Mit den nachstehenden Gefahrenhinweisen wird auf Gefährdungen, Risiken und sicherheitsrelevante Informationen durch eine hervorgehobene Darstellung besonders hingewiesen.

HINWEIS

Hinweise, die mit diesem Gefahrensymbol gekennzeichnet sind, werden auf eine besondere Sorgfaltspflicht für den Installateur und Betreiber hin.

ACHTUNG!

Hinweise die mit diesem Gefahrensymbol gekennzeichnet sind, beschreiben Verhaltensmassnahmen deren Nichtbeachtung zur Beschädigung oder vollständigen Zerstörung der Armatur führen können.

GEFAHR!

Hinweise, die mit diesem Gefahrensymbol gekennzeichnet sind, beschreiben Verhaltensmassnahmen deren Nichtbeachtung zu schweren Verletzungen oder Lebensgefahr für Anwender oder Dritte führen können.

LAGERUNG UND TRANSPORT

Die Armaturen sind gegen äussere Gewalt (wie Stoss, Schlag, Vibration) zu schützen. Die Armaturen sind vor der Einwirkung materialschädigender UVStrahlung geschützt zu lagern. Während der Lagerung sind die maximal zulässigen Temperaturgrenzen von 0 °C bis 50 °C einzuhalten.

WARNUNG

Ein schnelles Schließen von Armaturen ist zu vermeiden, um Druckstöße die durch Wasserschläge entstehen, zu verhindern. Rohrsysteme können hierdurch zerstört werden. Aus diesem Grunde sollten Schneckenradgetriebe installiert werden, die auf Anfrage lieferbar sind

KONFORMITÄTSEKTLÄRUNG

Verfügbar unter folgendem Link: https://www.aliaxis.it/website/aliaxis-it/DOWNLOAD/CERTIFICATI-FIP/PED_2014-68-UE/Declaration_PED_FIP.pdf

BETRIEBSDATEN

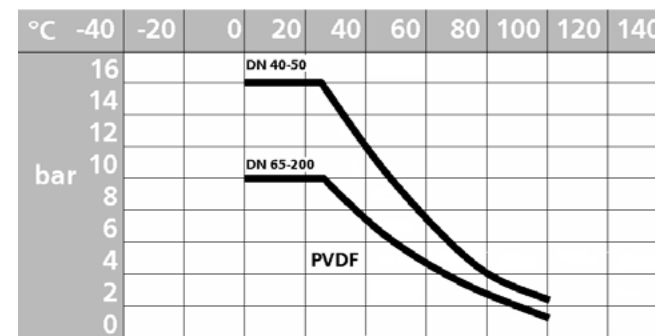
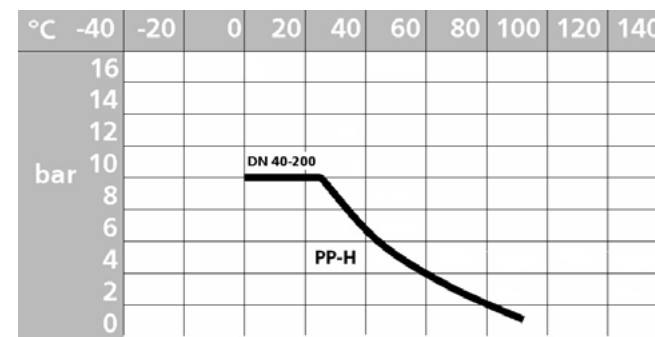
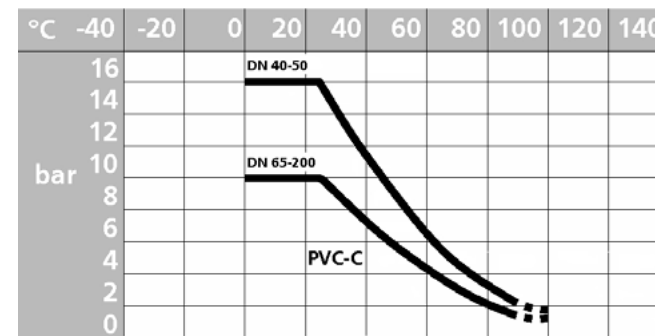
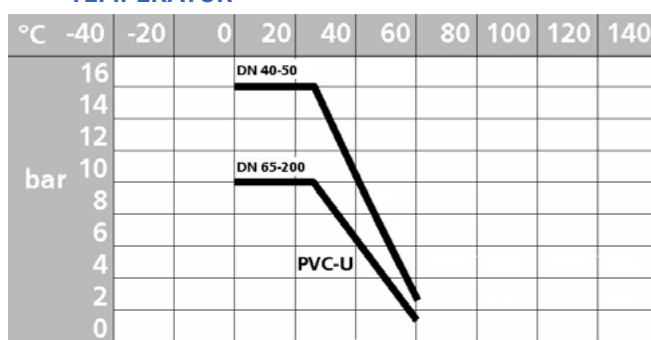
MATERIALEIGENSCHAFTEN

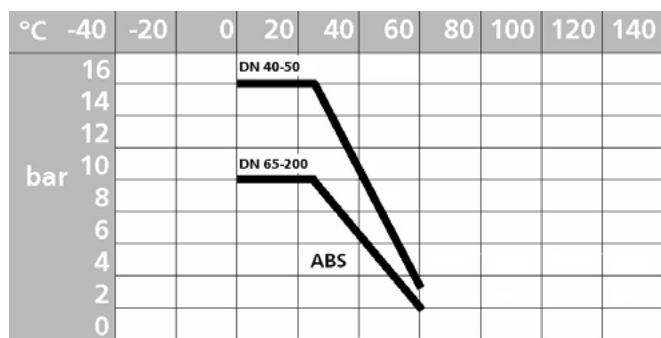
Der maximale Druck für FIP-Armaturen ist in Abb. 1 für Wasser bei 20 °C zu entnehmen. Für Betriebstemperaturen über 20 °C muss der zulässige Betriebsdruck gemäss Abb. 2 reduziert werden. FIP gibt auf seiner Internetseite (www.aliaxis.it) Hinweise zur chemischen Beständigkeit thermoplastischer und elastomerer Materialien gegenüber verschiedenartigsten Chemikalien.

1 NENNDRUCK BETRIEBSDRUCK IN ABHÄNGIGKEIT VON DER TEMPERATUR

	(mm)	d50	d63	d75	d90	d110	d140	d160	d225
Size	(mm)	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200
PVC-U	(bar)	16	16	10	10	10	10	10	10
PP-H	(bar)	10	10	10	10	10	10	10	10
PVC-C	(bar)	16	16	10	10	10	10	10	10
PVDF	(bar)	16	16	10	10	10	10	10	10
ABS	(bar)	16	16	10	10	10	10	10	10

2 BETRIEBSDRUCK IN ABHÄNGIGKEIT VON DER TEMPERATUR





! Für Anwendungen mit Betriebstemperaturen grösser als 90° C, wenden Sie sich bitte an den technischen Verkauf.

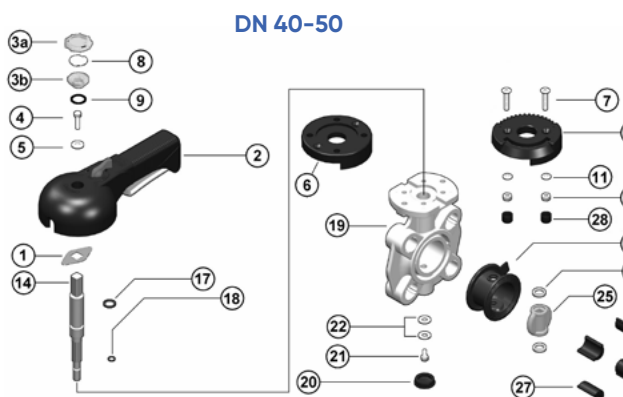
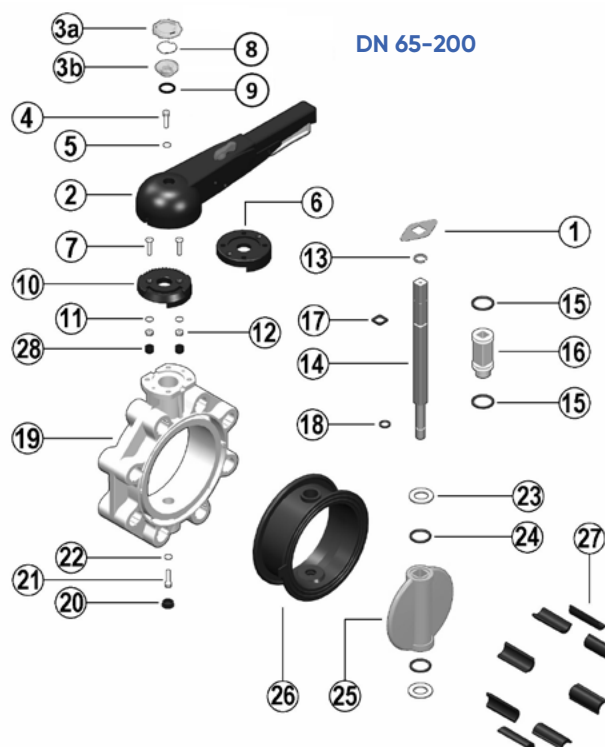
3 BETRIEBSTEMPERATUR (°C)

	T min. (°C)	T max. (°C)
PVC-U	0	60
PVC-C	0	100
PP-H	0	100
PVDF	0	100
ABS	0	60

4 Kv100 - WERT

Der kv100 - Wert nennt den Durchsatz in l/min für Wasser bei 20° C und einem Δp von 1 bar bei völlig geöffnetem Ventil.

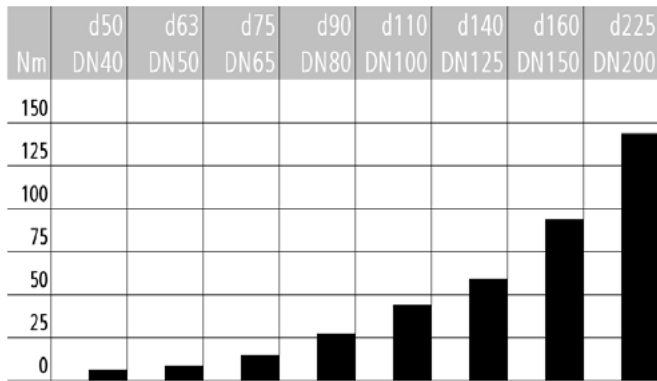
D	d50	d63	d75	d90	d110	d140	d160	d225
DN	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200
Kv100 l/min	1000	1285	1700	3550	5900	9850	18700	30500



Pos	Benennung	Werkstoff	n°
1	Stellungsanzeige	ABS	1
2	Handhebel	PVC	1
3	Abdeckkappe Oberteil	PVC	1
3b	Abdeckkappe Unterteil	PVC	1
4	Schraube	Edelstahl	1
5	Scheibe	Edelstahl	1
6	Adapterflansch	PP-GR	1
7	Schraube	Edelstahl	2
8	Etikettenhalter	PVC	1
9	Abdeckkappe O-ring	NBR	1
10	Rastplatte	GR-PP	1
11	Scheibe	Edelstahl	2
12	Mutter	Edelstahl	2
13	Seeger-Ring	Edelstahl	1
14	Welle	Edelstahl	1
15	O-ring f. Buchse	EPDM od. FKM	2
16	Buchse	Nylon	1
17	O-ring f. Welle	EPDM od. FKM	1
18	O-ring f. Welle	EPDM od. FKM	1
19	Gehäuse	GR-PP	1
20	Schutzkappe	PE	1
21	Schraube	Edelstahl	1
22	Scheibe	Edelstahl	1
23	Gleitring	PTFE	2
24	O-ring f. Scheibe	EPDM od. FKM	2
25	Klappenscheibe	PVC, PP, PVCC, ABS, PVDF	1
26	Auskleidung/Dichtung	EPDM, FKM, NBR	1
27	Zentriereinsätze	ABS	8
28	Schutzkappe	PE	2



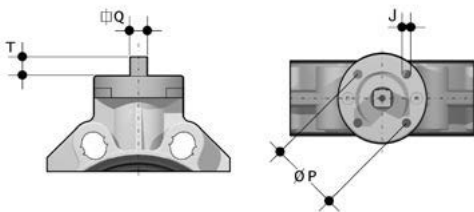
5 BETÄTIGUNGSDREHMOMENT BEI HÖCHSTEM, ZULÄSSIGEM BETRIEBSDRUCK



6 ANTRIEBE

Auf Anfrage können die Armaturen komplett mit Antrieben geliefert werden. Der Aufbau von standardisierten Schneckenradgetrieben, Elektro - oder Pneumatik -Antrieben erfolgt direkt auf den integrierten Adapterflansch, der nach ISO 5211, F05, F07 und F10 gebohrt ist.

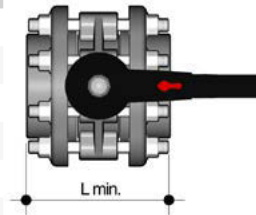
d	DN	J	P	T	Q
50	40	7	50	F 05	12
63	50	7	50	F 05	12
75	65	7	50/70	F 05/F 07	12
90	80	9	70	F 07	16
110	100	9	70	F 07	16
140	125	9	70	F 07	19
160	150	9	70	F 07	19
225	200	11	102	F 10	24



7 SCHRAUBENABMESSUNGEN ZUM EINBAU ZWISCHEN FLANSCHEN

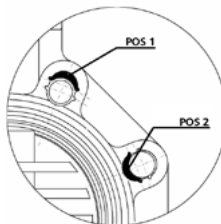
*Anzugsdrehmoment für Druckproben (1,5 x p_n bei 20 °C), bei neuen oder gefetteten Schrauben.

d	DN	L min	*Nm
50	40	M16x150	10
63	50	M16x150	13
75	65	M16x170	15
90	80	M16x180	18
110	100	M16x180	20
140	125	M16x210	35
160	150	M20x240	40
225	200	M20x260	55



8 POSITIONEN DER ZENTRIEREINSÄTZE

	Serie 1	Serie 2	Serie 3	Serie 4	Serie 5
d 50 DN 40	Pos.1	Pos.2	Pos.1	Pos.1	Pos.1
d 63 DN 50	Pos.1	Pos.2	Pos.1	-	-
d 75 DN 65	Pos.1	Pos.2	Pos.1	Pos.2	Pos.1
d 90 DN 80	Pos.1	Pos.2	Pos.1	Pos.2	Pos.1
d 110 DN 100	Pos.1	Pos.2	Pos.1	Pos.2	Pos.1
d 140 DN 125	Pos.1	Pos.2	Pos.1	Pos.2	Pos.1
d 160 DN 150	Pos.1	Pos.2	Pos.1	Pos.2	Pos.1
d 225 DN 200	Pos.1	PN10	Pos.2	Pos.2	Pos.1



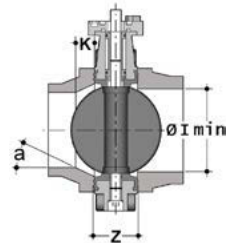
Serie 1: ISO 9624 PN6, DIN 2501 PN6, EN 1092-1/2 PN6, DIN 8063-4 PN6
 Serie 2: ISO 9624 PN10/16, DIN 2501 PN10/16, EN 1092-1/2 PN10/16, DIN 8063-4 PN10/16
 Serie 3: BS 10 Table A-D-E Spec. D-E
 Serie 4: ASME B16.5 class 150, BS EN 1759-1 class 150
 Serie 5: JIS B2220

MONTAGEANLEITUNG

A Artikel-Nr für FIP Vorschweißbunde

VALVE	PIPE	PVC-U PN16	PP-H PN6 SDR 17,6 - S8,3	PP-H PN10 SDR 11 - S5
50	50	QPV050	QBM17050	QBM11050
63	63	QPV063	QBM17063	QBM11063
75	75	QPV075	QBM17075	QBM11075
90	90	QPV090	QBM17090	QBM11090
110	110	QPV110	QBM17110	QBM11110
140	125	QPV125FKE	QBM17125	QBM11125
140	140	QPV140	QBM17140	QBM11140
160	160	QPV160	QBM17160	QBM11160
160	180	QPV180	QBM17180	QBM11180
225	200	QPV200FKE	QBM17FK200	QBM11FK200
225	225	QVR225	QBM17225	QBM11FK225

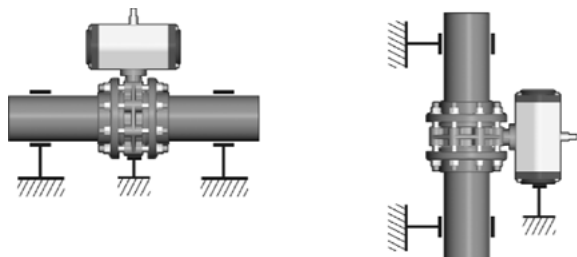
B Vor Montage der Absperrklappen ist zu überprüfen, ob die Bundbuchs ein vollständiges Öffnen der Klappenscheibe ermöglichen (l min- Maß beachten). Bei der Montage, ist es immer am besten FIP Formteile zu benutzen (Tab. A), oder in PE bzw. PPH Rohrleitungen für wenige Abmessungen müssen sowohl bei langen als auch kurzen Vorschweißbunde diese mechanisch bearbeitet werden (Winkel α und k-Maß beachten).



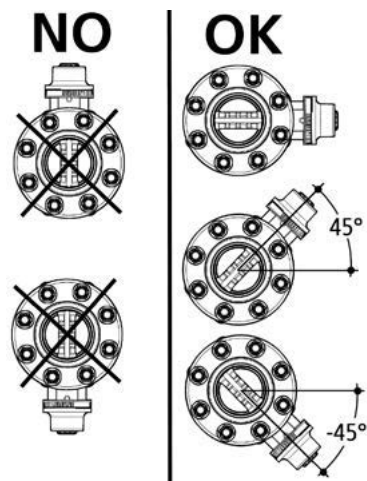
VALVE	PIPE	l min.	Z	PP-PE SDR 17,6 - S8,3 K	PP-PE SDR 11 - S5 α	PP-PE SDR 11 - S5 K	PP-PE SDR 11 - S5 α
50	50	25	33	-	-	-	-
63	63	28	43	-	-	-	-
75	75	47	46	-	-	-	-
90	90	64	49	-	-	-	-
110	110	84	56	-	-	-	-
140	125	108	64	-	-	-	-
140	140	108	64	-	-	-	-
160	160	134	70	-	-	26,5	20°
160	180	134	70	-	-	-	-
225	200	187	71	35	20°	35	25°
225	225	187	71	-	-	40	15°



- C** Angetriebene Klappen sollten, wenn nicht anders angegeben, mit dem Antrieb senkrecht über der Klappe eingebaut werden



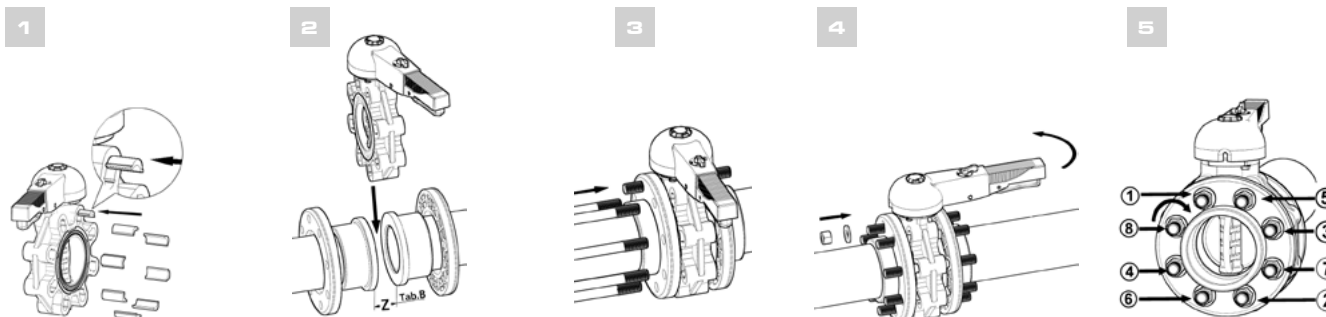
- D** Im Falle von verschmutzten oder abgelagerungsfähigen Flüssigkeiten.



ANZUGSDREHMOMENT FÜR DRUCKPROBENTAB.

Installieren: 1-2-3-4-5

Abbauen: 5-4-3-2-1

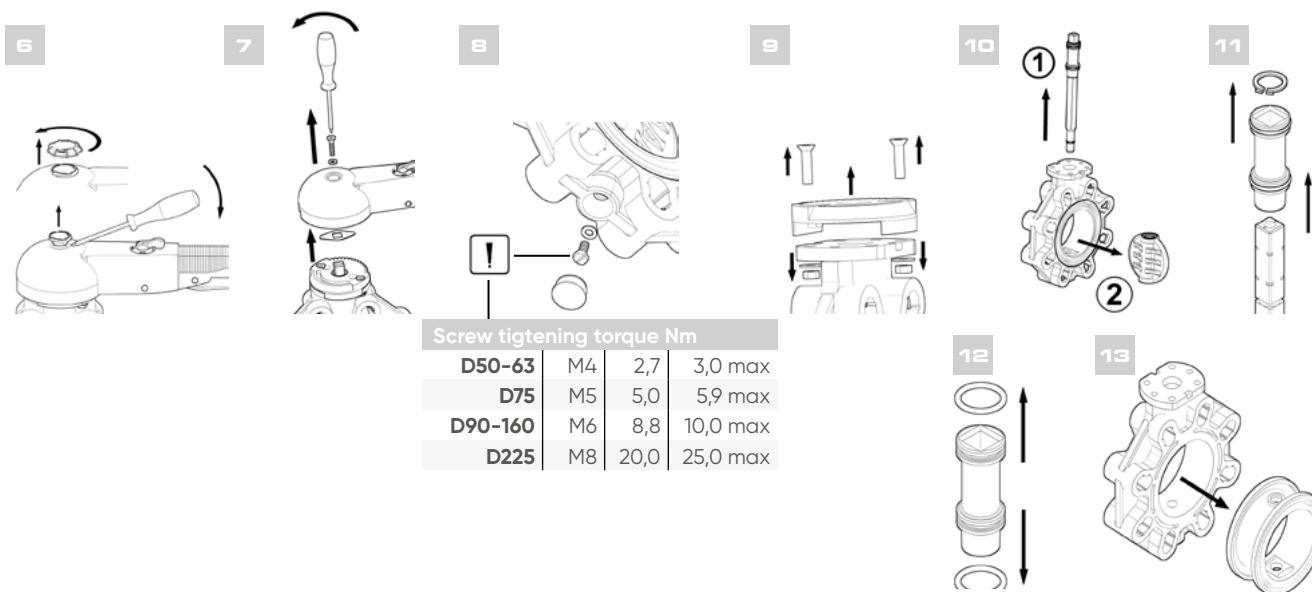


MONTAGE

Demontage: 6-7-8-9-10-11-12-13

Montage: 13-12-11-10-9-8-7-6

Schmieren Sie die Dichtung

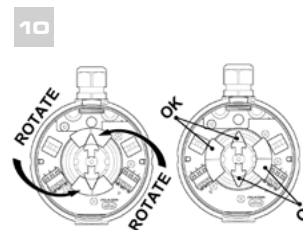
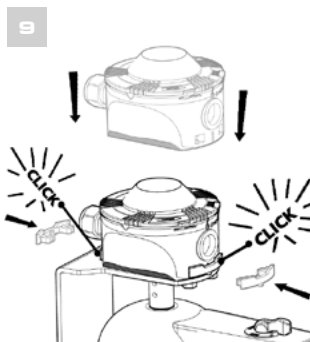
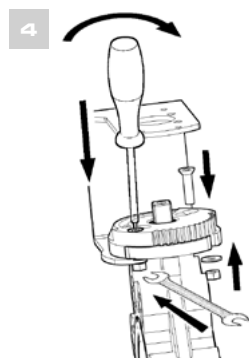
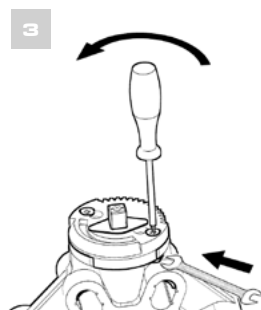
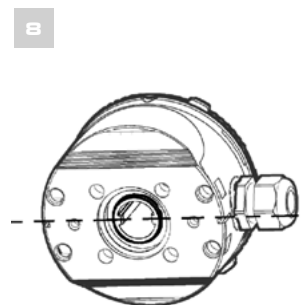
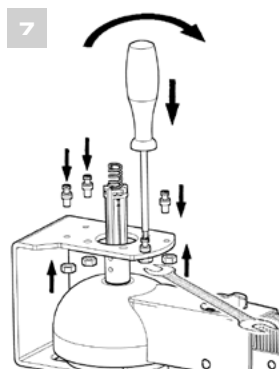
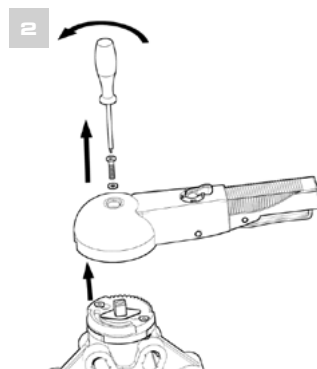
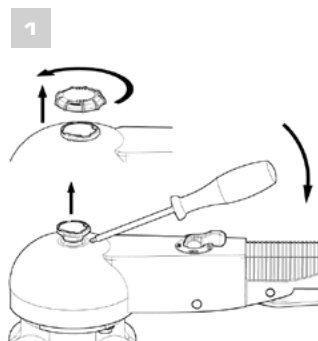
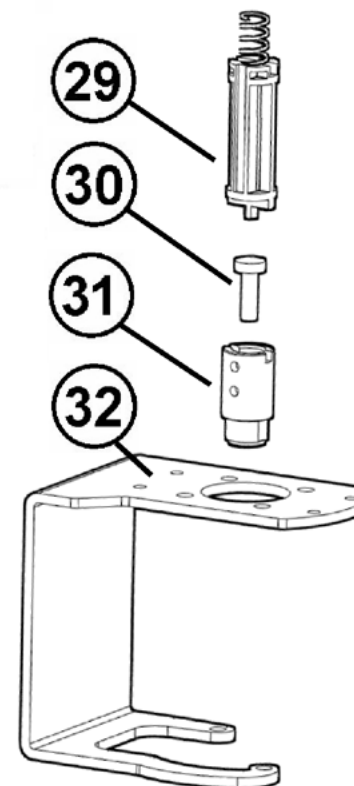
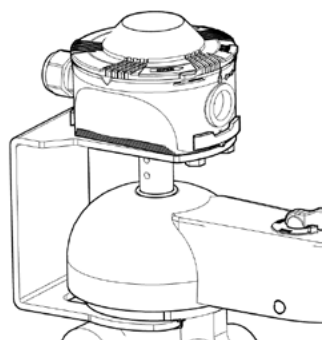


Screw tightening torque Nm

D50-63	M4	2,7	3,0 max
D75	M5	5,0	5,9 max
D90-160	M6	8,8	10,0 max
D225	M8	20,0	25,0 max

ACCESSORIES

KIT LSQT



Pos	Benennung	Werkstoff	n°
29	Modul/Feder	PP/Edelstahl	1
30	Schraube (D50-63 KIT)	Edelstahl	1
30	Schraube (D75-225)	Edelstahl	*
31	Adaptor Spindle	Edelstahl	1
32	Büge	Edelstahl	1

* Vom griff des ventils

EINLEITUNG

Um Schaden an der Armatur und einer mögliche Gefährdung von Personen zu vermeiden, ist die Bedienungsanleitung vor der Montage oder der Inbetriebnahme sorgfältig zu lesen.

GEFAHRENSHINWEISE

Mit den nachstehenden Gefahrenhinweisen wird auf Gefährdungen, Risiken und sicherheitsrelevante Informationen durch eine hervorgehobene Darstellung besonders hingewiesen.

HINWEIS

 Hinweise, die mit diesem Gefahrensymbol gekennzeichnet sind, werden auf eine besondere Sorgfaltspflicht für den Installateur und Betreiber hin.

ACHTUNG!

 Hinweise die mit diesem Gefahrensymbol gekennzeichnet sind, beschreiben Verhaltensmassnahmen deren Nichtbeachtung zur Beschädigung oder vollständigen Zerstörung der Armatur führen können.

GEFAHR!

 Hinweise, die mit diesem Gefahrensymbol gekennzeichnet sind, beschreiben Verhaltensmassnahmen deren Nichtbeachtung zu schweren Verletzungen oder Lebensgefahr für Anwender oder Dritte führen können.

EINLEITUNG

Diese Anleitung muss vor der Installation und/oder Inbetriebnahme gelesen werden, um Sach- und Personenschäden zu vermeiden.

KONFORMITÄTSERKLÄRUNG

Verfügbar unter folgendem Link: https://www.aliaxis.it/website/aliaxis-it/DOWNLOAD/CERTIFICATI-FIP/PED_2014-68-UE/Declaration_PED_FIP.pdf

LSQT - SCHALTSCHRANK ENDSCHALTER ¼ DREHUNG



WARNUNGEN

LESEN SIE VOR DER INSTALLATION DES SCHALTSCHRANKS DIE VORLIEGENDEN HINWEISE DURCH

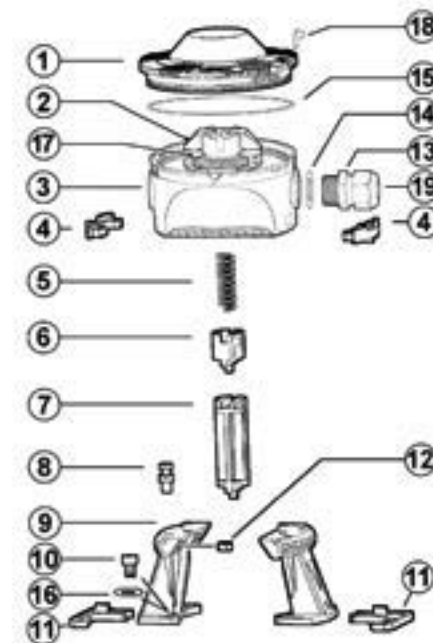
 Um Verletzungen oder den Tod von Menschen oder schwere Sachschäden zu vermeiden, lesen und befolgen Sie bitte alle Sicherheitshinweise in dieser Anleitung.

GEFÄHRLICHE SPANNUNG

 Trennen Sie die Stromversorgung, bevor Sie Arbeiten an den Geräten durchführen.

ACHTUNG!!! ABDECKUNG NICHT ABNEHMEN, WENN SPANNUNG AN DEM GERÄT ANLIEGT

 Die Nutzungsgrenzwerte der Schalter dürfen nicht überschritten werden. Durch Überschreiten der Grenzwerte kann das Gerät beschädigt werden. Der Schutzgrad hängt von der Kabelverschraubung und von der verwendeten Verkabelungsmethode ab. Endschalter-Schaltschrank zur Verwendung auf Vierteldrehungsventilen (90°-Drehung). Gehen Sie folgendermaßen vor, bevor Sie den Endschalter-Schaltschrank in Betrieb nehmen.



Pos.	Komponenten	Nr.
1	Deckel (Polycarbonat)	1
2	Nocken (POM schwarz)	2
3	Körper (PP GF30% schwarz)	1
4	Befestigungsclip (ABS schwarz)	2
5	Feder (Edelstahl)	1
6	Verbindungsmodul (PA66 GF30% schwarz)	1
7	Modulverlängerung (PA66 GF30% schwarz)	1
8	Befestigungsstifte (Edelstahl)	4
9	Klammer (PA66 GF30% schwarz)	2
10	Schraube M5 (Edelstahl)	4
11	Klammervverlängerung 130x30 (PA66 GF30% schwarz)	2
12	Mutter M5 (Edelstahl)	4
13	Kabelverschraubung (PA6)	1
14	O-Ring Kabelverschraubung (EPDM)	1
15	O-Ring-Abdeckung (EPDM)	1
16	Unterlegscheibe M5 (Edelstahl)	4
17	Anzeigen (POM gelb)	3
18	Sicherheitsblockierung (ABS schwarz)	1
19	Oberwurfmutter (PA)	1

Das Material der jeweiligen Komponente ist in Klammern angegeben

DIREKTE INSTALLATION

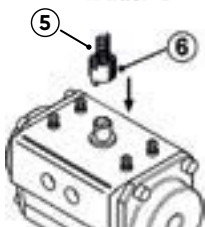
Namur Muster 80x30, h: 20-30 mm, D ≤ 18 mm

Entspricht den Bestimmungen VDI/YDE3845

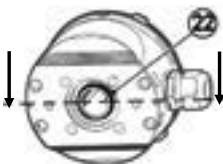
- 1** Die vier Blockierzapfen festschrauben und kräftig bis zum Anschlag festziehen (**8**).



- 2** Das Modul auf dem (**6**) und Feder (**5**) Schatt des Schützes positionieren.



- 3** Ritzel (**22**) mit auf dem Schütz positionierten Modul (**6**) ausrichten.



- 4a** Schaltschrank (**3**) auf Schütz montieren.



- 4b** Sicherstellen, dass er bis zum Anschlag gebracht wurde.



- 5** Schaltschrank befestigen, dazu die Clips (**4**) auf den Blockierzapfen mit einem hörbaren „Klick“ einrasten lassen.

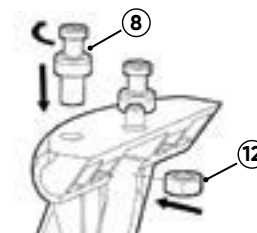


INSTALLATION MIT BOGEL

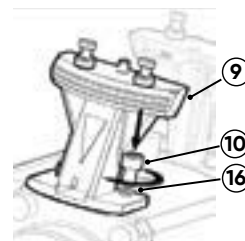
Namur Muster 80x30, h: 20-30 mm, D > 18 mm

Entspricht den Bestimmungen VDI/VDE3845

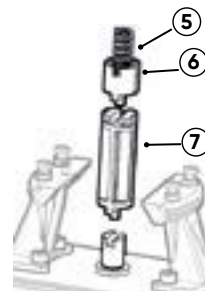
- 1** Die vier Muttern (**12**) in die entsprechenden Sitze des Bügels einführen, die vier Blockierzapfen festschrauben und kräftig bis zum Anschlag festziehen. (**8**)



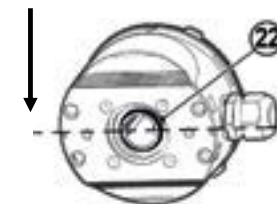
- 2** Die beiden Bügel (**9**) mit den vier Schrauben und den vier Unterlegscheiben (**10**) über dem Schütz befestigen (**16**).



- 3** Das Modul samt Verlängerung (**6**) und Feder (**5**) auf dem Schaft (**7**) des Schützes positionieren.



- 4** Ritzel (**22**) mit auf dem Schütz positionierten Modul (**6**) ausrichten.



- 5** Schaltschrank über den Bügeln montieren, darauf achten, dass er bis zum Anschlag gebracht wird.



- 6** Schaltschrank befestigen, dazu die Clips auf den Blockierzapfen mit einem hörbaren „Klick“ einrasten lassen.

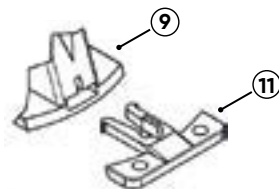


INSTALLATION MIT BOGEL

Namur Muster 130x30

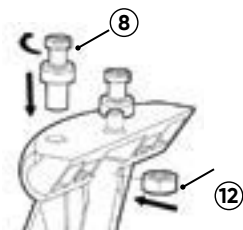
Entspricht den Bestimmungen VDI/VDE3845

- 1** Verlängerungen (11) auf die Bügel einführen (9).

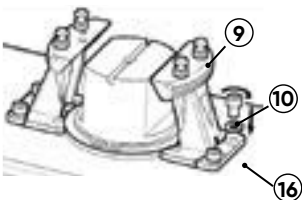


- 2** Verlängerungen (12) auf die Bügel einführen.

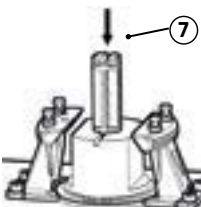
Die vier Muttern in die entsprechenden Sitze des Bügels einführen, die vier Blockierzapfen festschrauben und kräftig bis zum Anschlag festziehen (8).



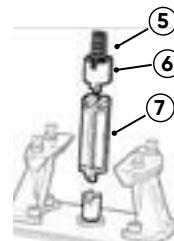
- 3** Die beiden Bügel mit den vier Schrauben und den vier Unterlegscheiben (10) über dem Schütz befestigen (16)



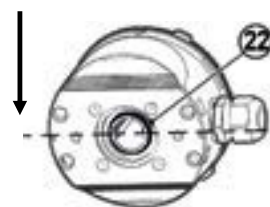
- 4a** Höhe des Schafts 50 mm. Nur die Verlängerung auf dem Schaft (7) des Schützes positionieren.



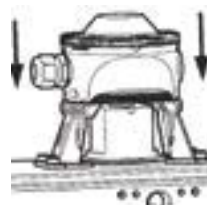
- 4b** Höhe des Schafts ≤ 30 mm. Das Modul (6) und Feder (5) samt Verlängerung auf dem Schaft des Schützes positionieren.



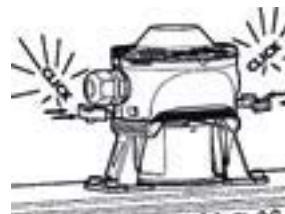
- 5** Ritzel (22) mit auf dem Schütz positionierten Modul (6) ausrichten.



- 6** Schaltschrank über den Bügeln montieren, darauf achten, dass er bis zum Anschlag gebracht wird.



- 7** Schaltschrank befestigen, dazu die Clips auf den Blockierzapfen (4) mit einem hörbaren "Klick" einrasten lassen correct.



VERDRAHTUNG GEFÄHRLICHE SPANNUNG

Trennen Sie die Stromversorgung, bevor Sie Arbeiten an den Geräten durchführen.

Ordnungsgemäßen Festziedrehmoment der Kabelverschraubung (13) prüfen.

Überwurfmutter (19) von der Kabelverschraubung (13) abnehmen.

Die Überwurfmutter (19) auf das Stromkabel aufziehen, d.h. Die Drähte durch die Kabelverschraubung (13) führen.

Die Drähte gemäß den Angaben im Schaltplan an den Klemmen (A) anschließen (siehe Etikett)

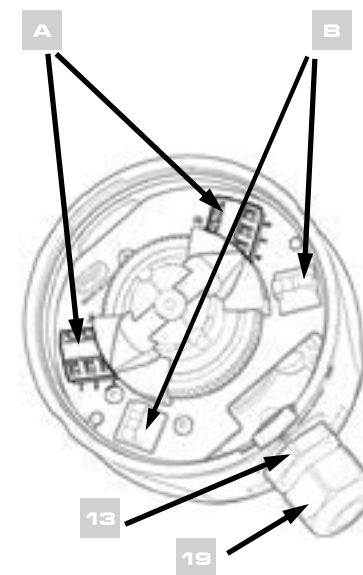
Die Schrauben der Klemmen (A) mit Schraubenzieher festziehen.

Die Drähte in den beiden Clips (B) aufnehmen.

Überwurfmutter (19) kräftig festziehen.

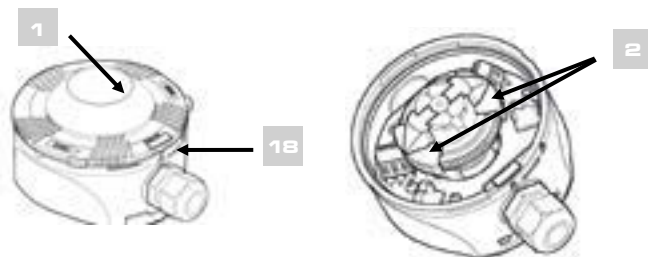
Deckel (1) wieder aufsetzen und im Uhrzeigersinn bis zum Anschlag drehen.

Sicherheitsblockierung (18) absenken.



EICHEN DER MIKROSCHALTER UND AUSRICHTUNG DER ANZEIGEN

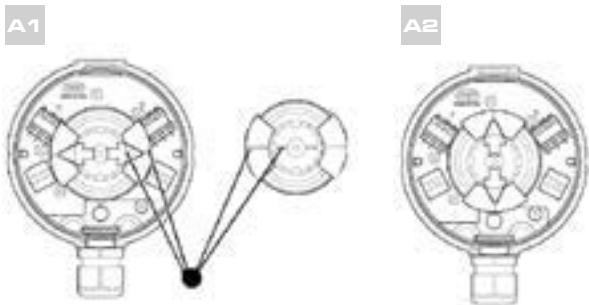
Sicherheitsblockierung (18) hochheben und Deckel (1) gegen den Uhrzeigersinn drehen und abnehmen. Erforderlichenfalls ausrichten gemäß Plänen: **A, B, C**.



A NORMALERWEISE GESCHLOSSENES 2-WEGE-VENTIL (ZUM ÖFFNEN GEGEN DEN UHRZEIGERSINN DREHEN)

A1) Normalerweise geschlossene Position, Nocken, Ritzel, Anzeiger, gedrückter Schalter "A" ausrichten.

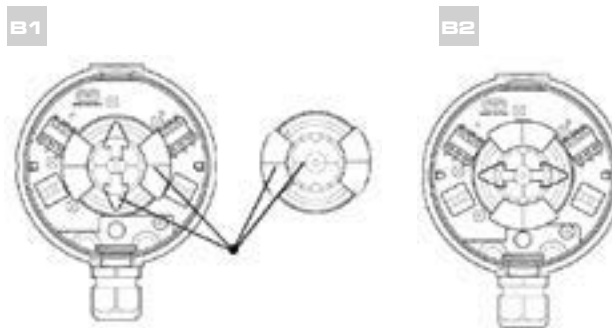
A2) Position unter Spannung, geöffnetes Ventil, Schalter "B" gedrückt.



B NORMALERWEISE GEÖFFNETES 2-WEGE-VENTIL (ZUM SCHLIESSEN GEGEN DEN UHRZEIGERSINN DREHEN)

B1) Normalerweise geöffnete Position, Nocken und Ritzel ausrichten, Anzeigen 90° zu den Nocken, Schalter "A" gedrückt.

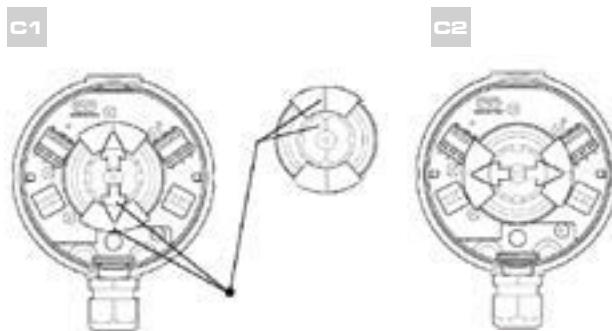
B2) Position unter Spannung, Ventil geschlossen, Schalter "B" gedrückt.



C NORMALERWEISE GEÖFFNETES 2-WEGE-VENTIL (ZUM SCHLIESSEN IM UHRZEIGERSINN DREHEN)

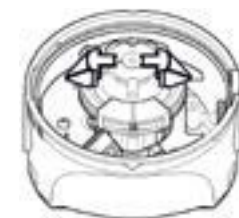
B1) Normalerweise geöffnete Position, Nocken, Ritzel und Anzeiger ausrichten, Schalter "B" gedrückt.

B2) Position unter Spannung, Ventil geschlossen, Schalter "A" gedrückt.

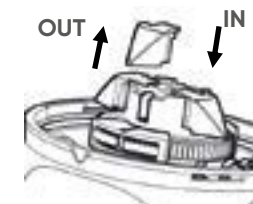


KONFIGURIEREN VON STELLUNGSANZEIGEN FÜR 2-WEGE- ODER 3-WEGE-VENTILE

2 WAYS



CHANGE



3 WAYS (T-type)



2 WAYS (L-type)



LABELLING SYSTEM - IDENTIFIKATIONSSYSTEM



Dieses Schildchen ist im transparenten Deckel eingeschlossen und kann einfach entfernt werden, um die weiße Seite zu personalisieren. Um den Sticker, der mit der EASYFIT Labelling System Software gedruckt wurde, auf das Schildchen zu kleben, bitte die folgende Schritte einhalten.

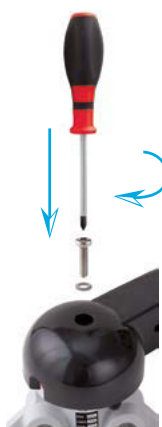
1



2



1



2



EEAG

Elektro- und Elektronik-Altgeräte.



Dieses Produkt fällt in den Geltungsbereich der Richtlinie 2012/19/EU über die Entsorgung von Elektro- und Elektronik-Altgeräten (EEAG).

Das Gerät darf nicht mit dem Hausmüll entsorgt werden, da es aus verschiedenen Materialien besteht, die in entsprechenden Anlagen recycelt werden können. Erkundigen Sie sich bei der Stadtverwaltung nach dem Standort von Sammelstellen für die Annahme und das anschließende ordnungsgemäße Recycling des Produkts.

Es wird auch daran erinnert, dass der Händler beim Kauf gleichartiger Geräte verpflichtet ist, das zu entsorgende Produkt kostenlos zurückzunehmen.

Das Produkt ist für die menschliche Gesundheit und die Umwelt nicht potenziell gefährlich, da es keine schädlichen Stoffe gemäß der Richtlinie 2011/65/EU (RoHS) enthält. Wenn es jedoch in die Umwelt gelangt, hat es negative Auswirkungen auf das Ökosystem.

Lesen Sie sich die Anweisungen sorgfältig durch, bevor Sie das Gerät zum ersten Mal benutzen. Verwenden Sie das Produkt unter keinen Umständen für einen anderen als den vorgesehenen Zweck, da bei unsachgemäßer Verwendung die Gefahr eines Stromschlags besteht.

Das Symbol der durchgestrichenen Mülltonne auf dem Etikett zeigt an, dass dieses Produkt den Vorschriften für Elektro- und Elektronik-Altgeräte entspricht. Das Abstellen von Geräten in der Umwelt oder deren unbefugte Entsorgung ist strafbar.