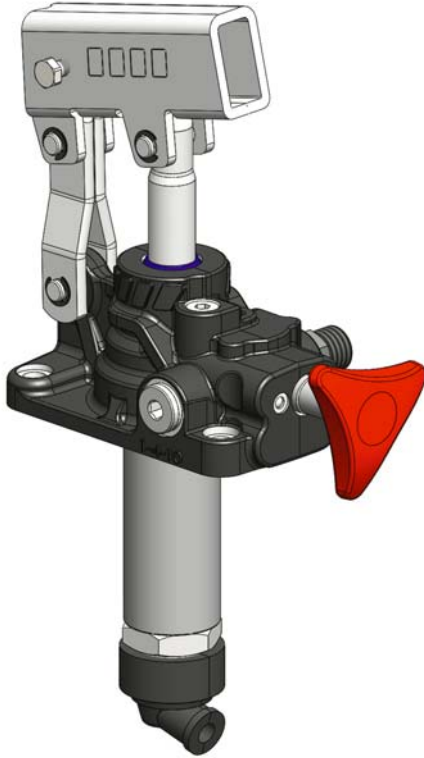


**POMPE A MANO**  
**HAND PUMPS**

**SERIE**  
SERIES

**PMS**  
**12-25-45**

Codice fascicolo: 997-400-10610



Pompe a mano con azionamento a doppio effetto (la pompa eroga olio sia spingendo che tirando la leva) per impianti a semplice effetto, direttamente flangiabili su serbatoio e con rubinetto di scarico a tenuta conica incorporato. Sono disponibili in tre diverse cilindrate per consentire le più svariate applicazioni e per limitare lo sforzo sulla leva in ogni situazione. Hanno il corpo in ghisa con trattamento anticorrosione RAL 9004 e lo stelo nichelato.

*Double acting hand pumps (the pump delivers oil both pushing and pulling the lever) suitable to operate single acting applications. They can be fitted also onto tank and are equipped with tapered lowering valve.*

*These hand pumps can have 3 different sizes to perform various applications and to achieve smoother loads on the lever. They are available with nodular cast-iron body anti-corrosion treatment RAL 9004 and nickel-plated spool.*

Data: Giovedì 23 ottobre 2014

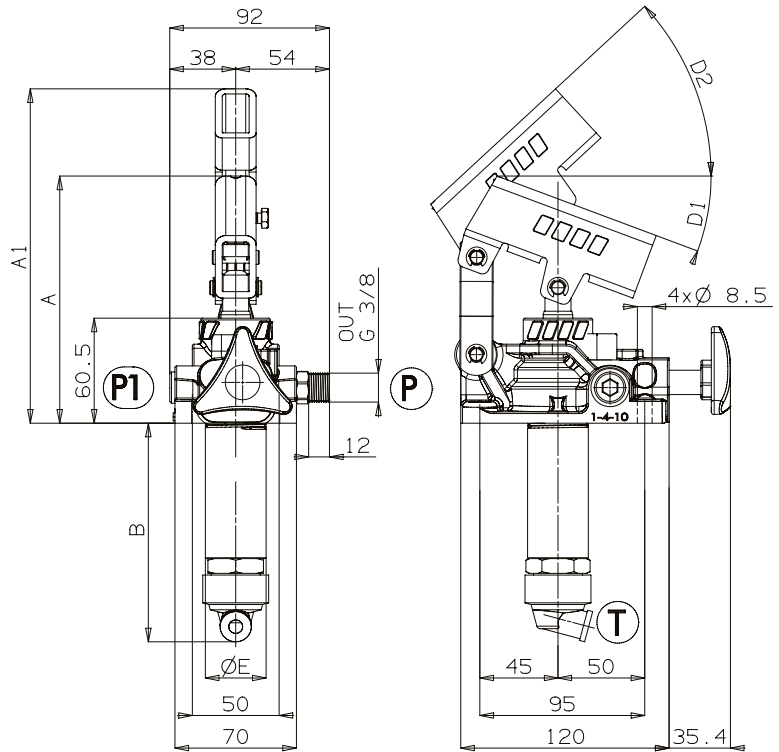
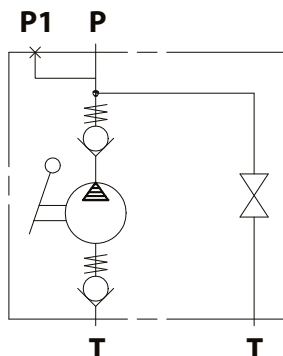
Codice foglio: 997-106-00410 Rev: AL

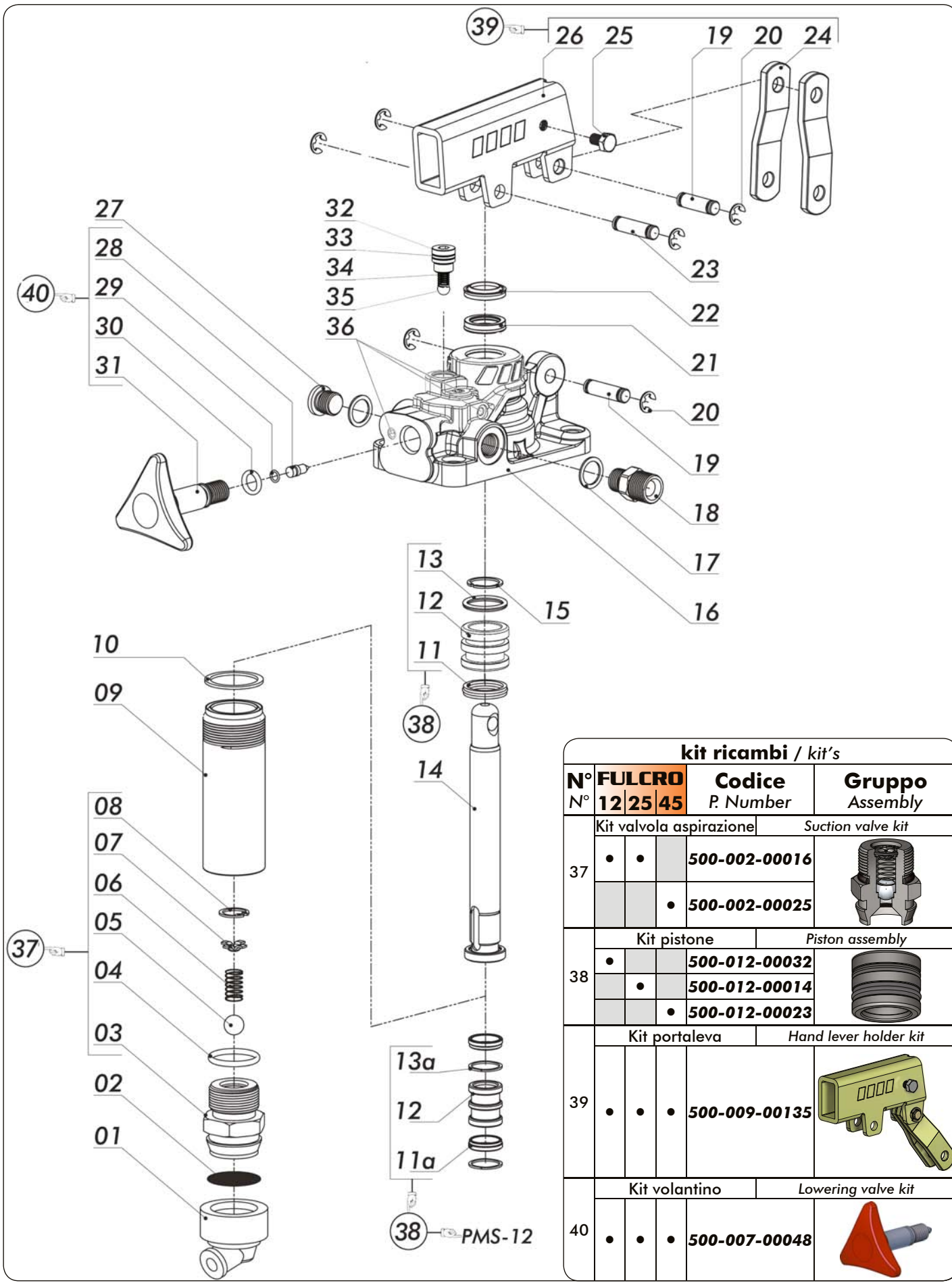
|  |  | <b>Codice di ordinazione (senza leva)</b><br>Order code (without lever) |                  |                  |
|--|--|---|------------------|------------------|
|  |  | <b>FULCRO 12</b>  | <b>FULCRO 25</b> | <b>FULCRO 45</b> |
| <b>Senza Serbatoio</b><br>Without Tank |  | 106-015-00017   | 106-004-00010    | 106-004-00029    |
|  | <b>Con serbatoi</b><br>With Tank<br>Litri / Litres |   |                  |                  |
| <b>Plastica / Plastic</b>              | <b>1</b>   | 106-014-00018   | 106-002-00012    | 106-003-00066    |
|  | <b>2</b>   | 106-014-00027   | 106-002-00021    | 106-003-00057    |
|  | <b>3</b>   | 106-014-00036   | 106-002-00030    | 106-003-00011    |
|  | <b>5</b>   | 106-014-00045   | 106-002-00049    | 106-003-00020    |
|  | <b>7</b>   | 106-014-00054   | 106-002-00058    | 106-003-00039    |
|  | <b>10</b>  | 106-014-00063   | 106-002-00067    | 106-003-00048    |

**Ingombro**  
Overall Dimension

|                  | A   | A1  | B   | D1   | D2 | E  |
|------------------|-----|-----|-----|------|----|----|
|                  | mm  | mm  | mm  | °    | °  | mm |
| <b>FULCRO 12</b> | 143 | 187 | 120 | 18,5 | 45 | 35 |
| <b>FULCRO 25</b> | 142 | 193 | 127 | 20   | 45 | 35 |
| <b>FULCRO 45</b> | 141 | 193 | 138 | 20   | 45 | 42 |

**Schema Idraulico / Hydraulic layout**





Codice fascicolo: 997-400-10610

Data: Giovedì 23 ottobre 2014

Codice foglio: 997-106-00410 Rev: AL

| N°  | FULCRO |    |    | Codice<br>P. Number | Descrizione                  |                          | Q. |
|-----|--------|----|----|---------------------|------------------------------|--------------------------|----|
|     | 12     | 25 | 45 |                     | Description                  |                          |    |
| 1   | •      | •  | •  | 506-000-00392       | Guarnizione portafiltro      | Suction cap              | 1  |
| 2   | •      | •  | •  | 550-001-00012       | Filtro acciaio rotondo       | Steel strainer           | 1  |
| 3   | •      | •  | •  | 540-005-00019       | Corpo valvola di aspirazione | Suction valve casing     | 1  |
|     |        |    |    | 540-005-00037       |                              |                          |    |
| 4   | •      | •  | •  | 506-002-00201       | Guarnizione OR               | O-ring                   | 1  |
|     |        |    |    | 506-003-00095       |                              |                          |    |
| 5   | •      | •  | •  | 510-009-00116       | Sfera tenuta                 | Ball                     | 1  |
| 6   | •      | •  | •  | 512-005-00689       | Molla valvola di aspirazione | Spring for suction valve | 1  |
| 7   | •      | •  | •  | 550-001-00101       | Guidamolla                   | Spring-guide             | 1  |
| 8   | •      | •  | •  | 501-001-00113       | Anello elastico              | Circlip                  | 1  |
| 9   | •      | •  | •  | 537-002-00037       | Cilindro acciaio             | Steel stem               | 1  |
|     |        |    |    | 537-002-00019       |                              |                          |    |
|     |        |    |    | 537-002-00028       |                              |                          |    |
| 10  | •      | •  | •  | 116-009-01255       | Rondella tenuta cilindro     | Washer                   | 1  |
|     |        |    |    | 116-009-01308       |                              |                          |    |
| 11a | •      | •  | •  | 506-000-00516       | Guarnizione speciale         | Special gasket           | 2  |
| 11  | •      | •  | •  | 506-000-00258       | Guarnizione speciale         | Special gasket           | 1  |
|     |        |    |    | 506-000-00267       |                              |                          |    |
| 12  | •      | •  | •  | 532-002-00082       | Pistone                      | Piston                   | 1  |
|     |        |    |    | 532-002-00028       |                              |                          |    |
|     |        |    |    | 532-002-00037       |                              |                          |    |
| 13a | •      | •  | •  | 550-004-00046       | Anello antiestrusore         | Locking ring             | 2  |
| 13  | •      | •  | •  | 506-002-00158       | Guarnizione OR               | O-ring                   | 1  |
|     |        |    |    | 506-002-00229       |                              |                          |    |
| 14  | •      | •  | •  | 535-001-00121       | Stelo                        | Piston rod               | 1  |
|     |        |    |    | 535-001-00069       |                              |                          |    |
|     |        |    |    | 535-001-00078       |                              |                          |    |
| 15  | •      | •  | •  | 501-011-00086       | Anello elastico              | Circlip                  | 1  |
|     |        |    |    | 501-011-00111       |                              |                          |    |
|     |        |    |    | 501-011-00148       |                              |                          |    |
| 16  | •      | •  | •  | 517-001-00754       | Corpo pompa a mano           | Hand pump housing        | 1  |
|     |        |    |    | 517-001-00772       |                              |                          |    |
|     |        |    |    | 517-001-00790       |                              |                          |    |
| 17  | •      | •  | •  | 116-009-00158       | Rondella utilizzi            | Washer                   | 2  |
| 18  | •      | •  | •  | 116-006-00259       | Nipplo utilizzi              | Pressure nipple          | 1  |
| 19  | •      | •  | •  | 526-001-00095       | Spinotto lunghezza 26mm      | Gudgeon Pin 26mm         | 2  |
| 20  | •      | •  | •  | 501-015-00028       | Anello elastico              | Circlip                  | 6  |
| 21  | •      | •  | •  | 506-000-01926       | Guarnizione a labbro         | Lip seal                 | 1  |
|     |        |    |    | 506-000-01935       |                              |                          |    |
|     |        |    |    | 506-000-01944       |                              |                          |    |
| 22  | •      | •  | •  | 506-000-02729       | Guarnizione raschiapolvere   | Wiper seal               | 1  |
|     |        |    |    | 506-000-02701       |                              |                          |    |
|     |        |    |    | 506-000-02738       |                              |                          |    |
| 23  | •      | •  | •  | 526-001-00086       | Spinotto                     | Gudgeon Pin              | 1  |
| 24  | •      | •  | •  | 538-001-00081       | Biella                       | Brackets                 | 2  |
| 25  | •      | •  | •  | 502-002-00012       | Vite blocco leva             | Locking lever screw      | 1  |
| 26  | •      | •  | •  | 539-001-00212       | Portaleva                    | Lever holder             | 1  |
| 27  | •      | •  | •  | 115-006-00117       | Tappo utilizzo               | Pressure port plug       | 1  |
| 28  | •      | •  | •  | 543-004-00023       | Spillo tenuta                | Pin                      | 1  |
| 29  | •      | •  | •  | 506-000-00589       | Guarnizione OR               | O-ring                   | 1  |
| 30  | •      | •  | •  | 506-002-00014       | Guarnizione OR               | O-ring                   | 1  |
| 31  | •      | •  | •  | 500-001-00357       | Volantino                    | Lowering wheel           | 1  |
| 32  | •      | •  | •  | 540-003-00477       | Tappo valvola di ritegno     | Plug                     | 1  |
| 33  | •      | •  | •  | 506-019-09150       | Guarnizione ORM 0090-15      | ORM 0090-15              | 1  |
| 34  | •      | •  | •  | 512-005-00509       | Molla                        | Spring                   | 1  |
| 35  | •      | •  | •  | 510-009-00054       | Sfera 1/4" (Ø6.35)           | Ball 1/4" (Ø6.35)        | 1  |
| 36  | •      | •  | •  | 504-010-00018       | Grano conico 1/16" NPTF      | Conical plug 1/16" NPTF  | 3  |

## Dati Tecnici Technical data

| Tipo pompa<br>Pump type | Pressione Massima<br>Max. pressure setting<br><br>bar | Cilindrata<br>Displacement         |                                |                                  | Peso<br>Weight<br><br>Kg |
|-------------------------|---|------------------------------------|--------------------------------|----------------------------------|--------------------------|
|                         |   | Completa / Full<br>cm <sup>3</sup> | Tiro / Pull<br>cm <sup>3</sup> | Spinta / Push<br>cm <sup>3</sup> |                          |
| <b>FULCRO 12</b>        | 350   | 12                                 | 6,1                            | 5,9                              | 2,8                      |
| <b>FULCRO 25</b>        | 300   | 25                                 | 13,4                           | 11,6                             | 2,9                      |
| <b>FULCRO 45</b>        | 270   | 45                                 | 23,7                           | 21,3                             | 3,2                      |

|   |  |             |        |       |      |
|---|--|-------------|--------|-------|------|
| Fluido idraulico<br>Fluid   | Minerale o sintetico compatibile con guarnizioni:<br>Mineral or synthetic compatible with the following seals:<br>NBR, FKM, FPM, Nylon |             |        |       |      |
| Viscosità cinematica consigliata<br>Kinematic viscosity suggested | T media ambiente (°C)<br>Average ambient temp. (°C)  | < -10       | -10÷10 | 10÷35 | > 35 |
|   | VG (cSt = mm <sup>2</sup> /s)  | 22          | 32     | 46    | 68   |
| Temperatura di utilizzo<br>Working temperature                    |  | -15° +110°C |        |       |      |

### Kit di guarnizioni Seal kit

| <b>FULCRO 12</b> | <b>FULCRO 25</b> | <b>FULCRO 45</b> |
|------------------|------------------|------------------|
| 106-900-00408    | 106-900-00453    | 106-900-00506    |



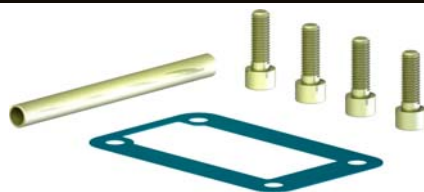
106-000-00032 PIA.APP.GRP.PMP. PMS-PMI  
 MOUNTING PLATE FOR TANK PMS-PMI



106-000-00078 AST. CON IMP.PMS/PMI L.600 MM 35x15  
 LEVER FOR PMS/PMI L. 600 MM 35x15



106-000-00247 MAGGIORAZIONE RITORNO A MOLLA X PMS  
 SPRING RETURN FOR PMS

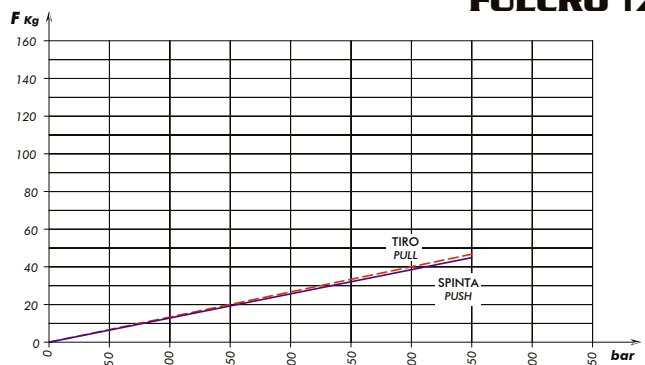


106-960-00700 KIT MONTAGGIO POMPE PMS/PMI  
 MOUNTING KIT FOR PUMPS PMS/PMI

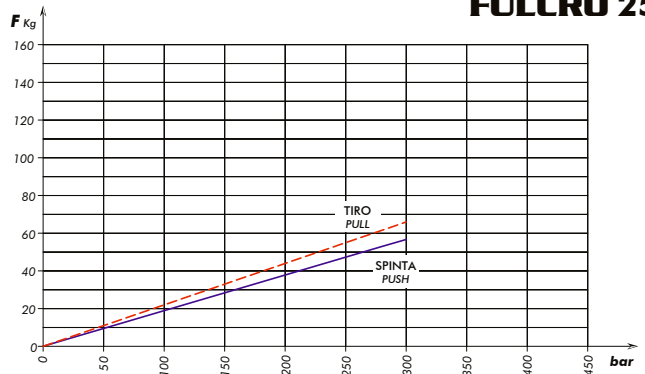
### Sforzo in fase di pompaggio con leva standard

Load while pumping with standard lever

**FULCRO 12**



**FULCRO 25**



**FULCRO 45**

